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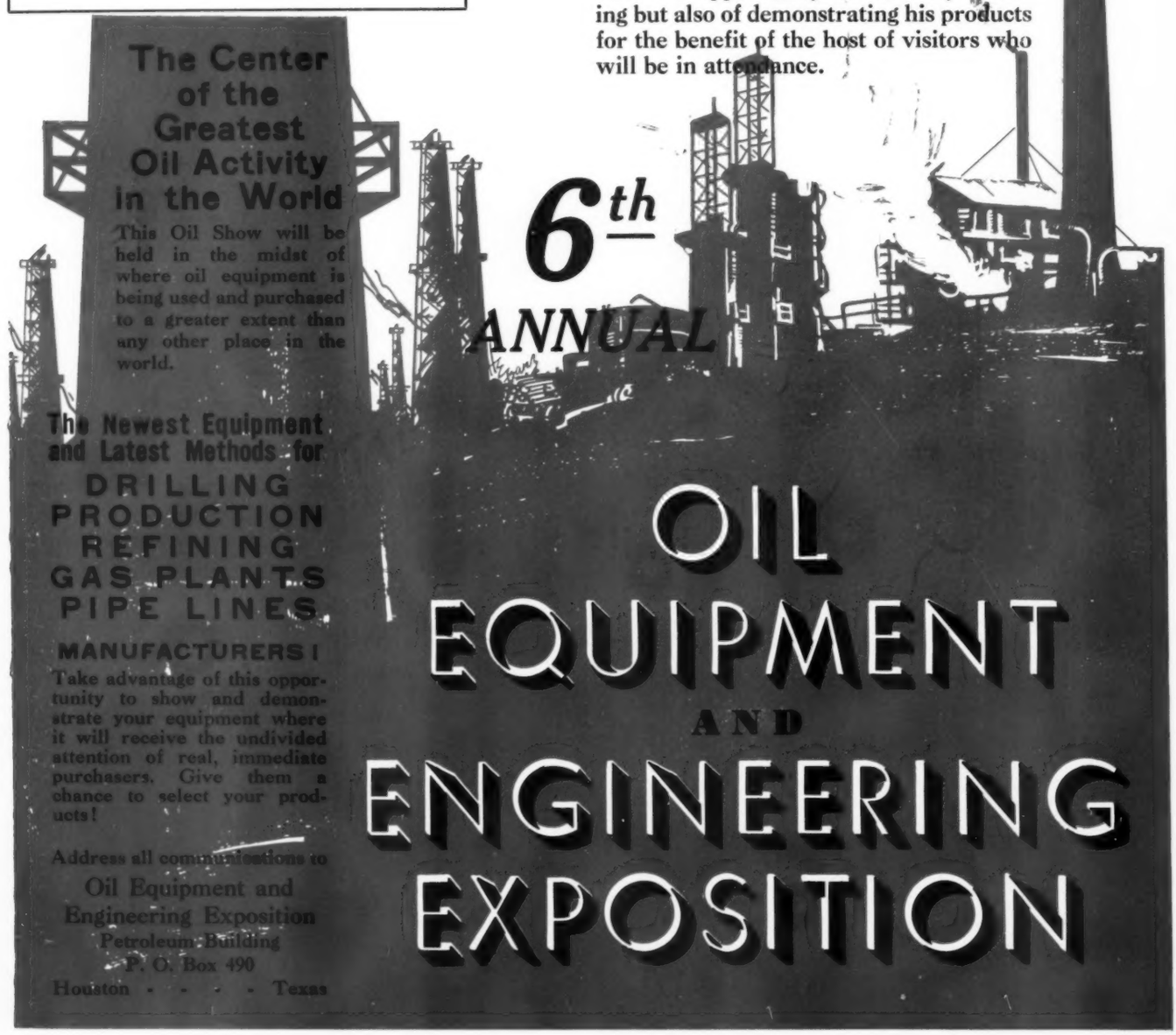

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OIL MAN'S CALENDAR

January

14-18—Detroit, Mich., Society of Automotive Engineers, annual meeting, Book Cadillac Hotel.

17-18—Minneapolis, Minn., Northwest Petroleum Association, Minnesota division, West Hotel.

February

5-6—Des Moines, Iowa, Iowa Petroleum Association, Hotel Fort Des Moines.

7-8—Huron, S. D., South Dakota Oil Men's Association, Marvin Hughitt Hotel.

7-8—Louisville, Ky., Kentucky Petroleum Marketers Association.

12-14—Columbus, Ohio, Ohio Petroleum Marketers Association, annual dinner, Deshler-Wallick Hotel.

18-21—New York, Petroleum Division, A.I.M.E. (A.I.M.E. annual meeting).

March

21-23—Wichita, Kans., American Association of Petroleum Geologists, annual meeting.

April

8-13—Houston, Tex., Oil Equipment and Engineering Exposition.

11-13—Dallas, Tex., Petroleum Industry Electrical Association, Baker Hotel.

22—New York American Chemical Society, semiannual meeting.

(?)—Wichita, Kans., Kansas Oil Men's Association.

May

1-3—Tulsa, Natural Gasoline Association of America, Tulsa Hotel.

14-16—Tulsa, American Petroleum Institute, fifth mid-year meeting, Mayo Hotel.

June

20-21—State College, Pa., Pennsylvania Grade Crude Oil Association, annual meeting.

24-28—Detroit, Mich., American Society for Testing Materials, annual meeting, Book Cadillac Hotel.

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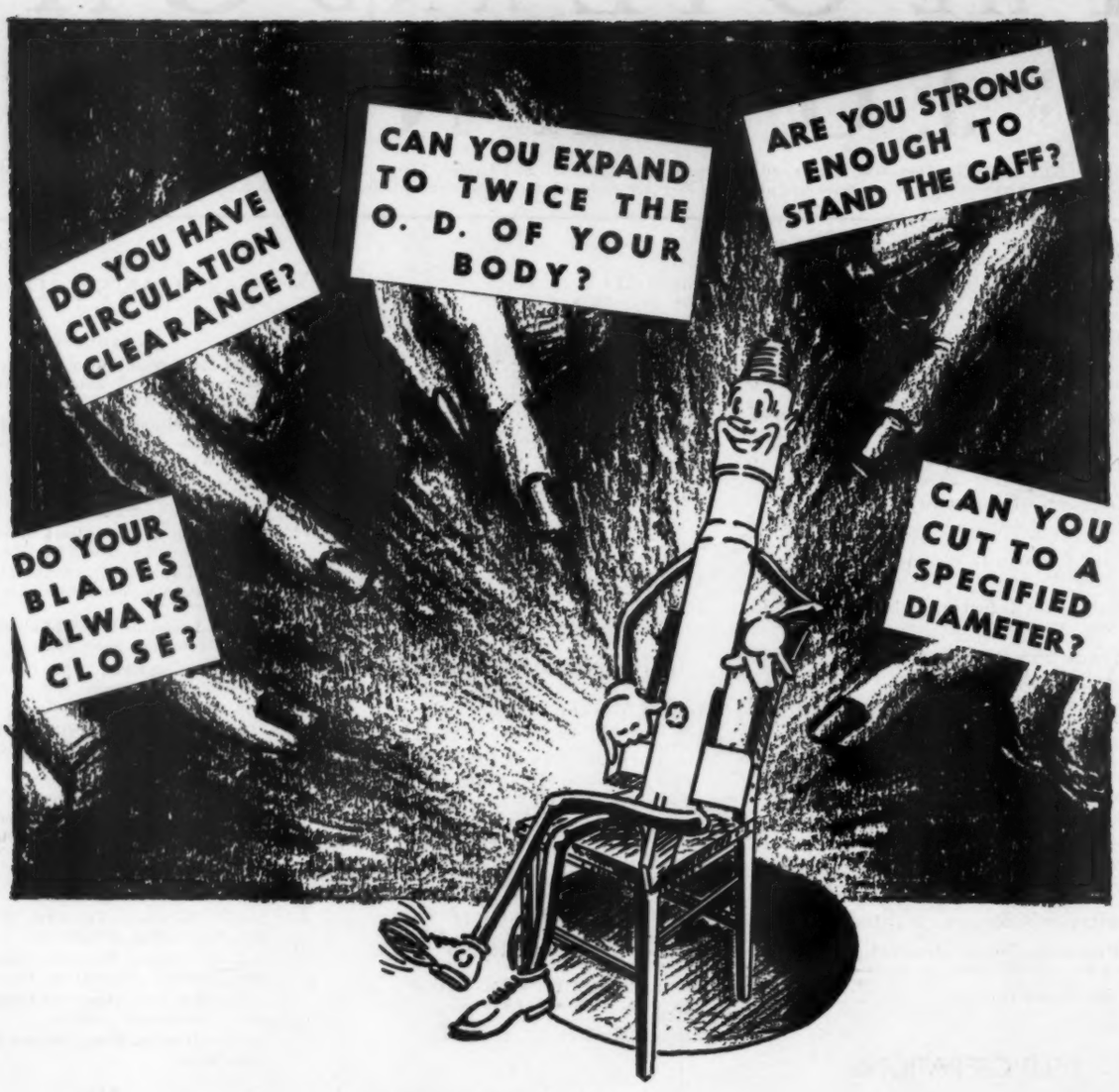

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Oil Production Temporarily Below Allowable as Wildcatters Increase Activity in Many Areas

By ANDREW M. ROWLEY

A SUBSTANTIAL reduction in crude oil production last week, contributed mainly by Oklahoma with Kansas doing its part, was due almost entirely to the slackening of operations during the holidays and to the general practice in these states of producing the bulk of their monthly allowables during periods best suited for their operations and needs. Indications are the output in Oklahoma this week will show a material gain. Production of that state last week was far below its average of 494,000 barrels daily for the past year.

Field operations continue at an exceptionally high level in most areas despite the fact this is the season of the year when field work usually is curtailed greatly because of weather conditions. Wildcatters are busy in numerous promising areas throughout the Mid-Continent and Gulf coastal territories. Russell County, Kansas, is experiencing an intensive wildcatting campaign and the activity prevalent in that section now indicates Russell County will be the busiest area of Kansas this year as far as drilling is concerned. The county already has 10 proven oil fields.

The western part of Kansas is getting a big play due to recent discoveries, one well in the western part of Scott County making 572 barrels daily while a discovery in Trego County is pumping at the rate of 828 barrels daily.

The policy, long followed by California operators, of endeavoring to reduce their large stocks of fuel oil and unrefinable crudes, seems to have been changed as a result of large shipments of these oils to the Atlantic Seaboard for domestic consumption during the past year and present indications that consumption of these oils will continue at a high level and that exports may also increase. The demand, coupled with lower stocks, has caused operators to feel present stock levels are low enough and a movement is gaining headway to obtain an increase in heavy oil production.

New locations are being made in the Hastings area of Brazoria County, on the Texas gulf coast where the Stanolind Oil and Gas Co. recently completed a potential oil producer. Throughout the coastal area wildcatters are more busy than usual. The Gulf Coast got its first 10,000-foot test during the past week when a well in the Bosco Field of Acadia and St. Landry Parishes in Louisiana was drilled to 10,002 feet. The test is shut down while operators are mixing mud at the depth given.

While there is some nervousness in the refined oil market due to the Supreme Court decision in the Panama and Amazon cases, refiners feel optimistic regarding the outlook and were in a better mood on Tuesday as the result of retail price advances in the East.

Crude Oil Production in the United States

Estimated daily average production for the week ending January 5, a comparison with previous week and the Federal allowables follow:

		Federal allowable	
Oklahoma—	Jan. 5	January	Dec. 29
Oklahoma City	110,675	.....	153,575
Seminole-St. Louis	66,925	.....	78,675
Remainder of State	229,400	.....	236,850
Total Oklahoma	407,000	489,300	469,100
East Texas—			
Lathrop	154,720	.....	153,620
Kilgore	145,549	.....	144,625
Joiner	131,258	.....	132,444
Total East Texas	431,527	.....	430,689
West Texas	148,874	.....	149,067
North Central Texas	90,645	.....	90,608
Texas Panhandle	55,926	.....	61,157
East Central Texas	51,720	.....	46,470
Gulf Coast—Texas	173,595	.....	176,408
Southwest Texas	55,398	.....	54,623
Total State of Texas	1,007,685	1,006,800	1,009,022
Kansas	137,550	137,100	142,750
North Louisiana	24,025	.....	23,890
Gulf Coast—Louisiana	84,407	.....	85,410
Total Louisiana	108,432	99,700	109,300
Arkansas	33,595	31,000	34,310
Eastern Fields (except Michigan)	101,000	96,100	103,000
Michigan	28,543	28,100	27,687
Rocky Mountain Area	93,640	98,300	93,390
California—			
Santa Fe Springs	38,000	.....	38,750
Long Beach	56,750	.....	57,650
Mountain View	12,500	.....	11,050
Elwood	9,250	.....	10,950
Kettleman Hills	63,500	.....	58,100
Remainder of State	288,000	.....	290,500
Total California	468,000	473,900	467,000
Total United States	2,385,445	2,460,300	2,455,559

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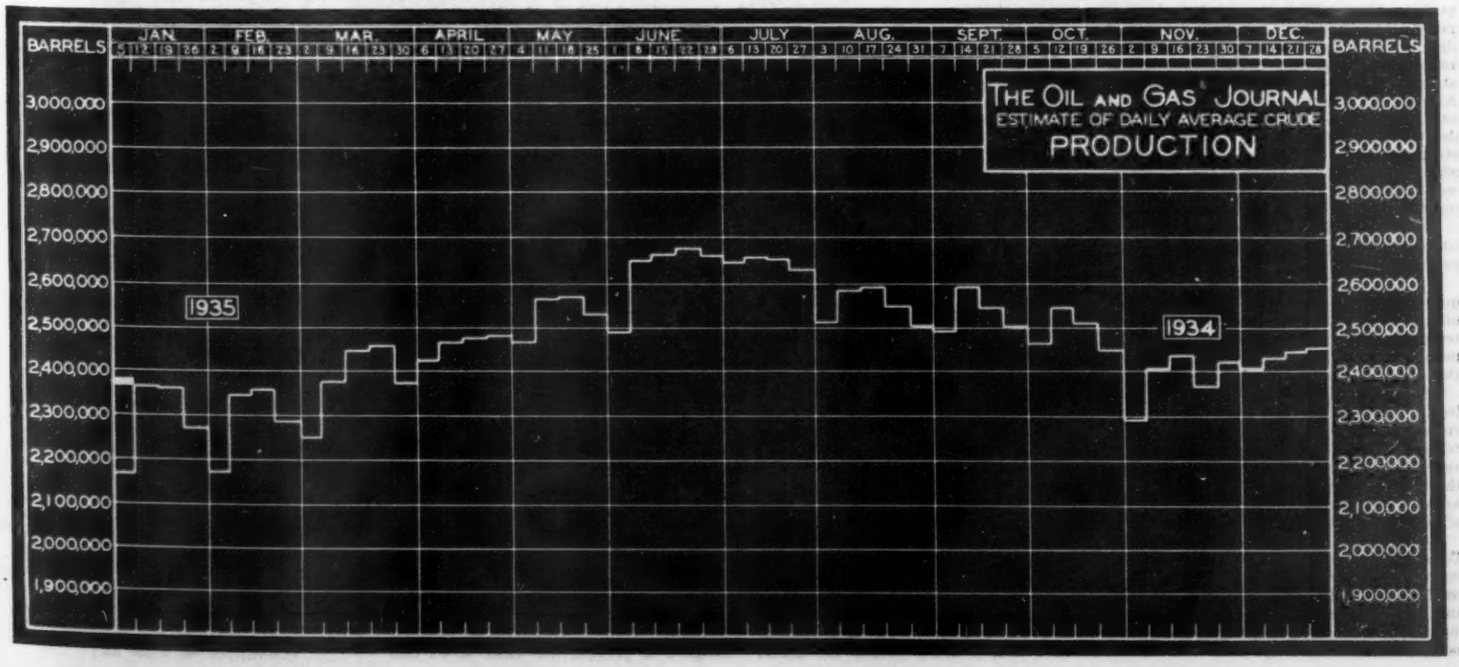


Eight Oil States, Including Texas, Vote for an Interstate Compact

By ANDREW M. ROWLEY

PONCA CITY, Okla., Jan. 5.—Representatives of the governors and governors-elect of eight oil producing states, meeting here last Thursday at the invitation of E. W. Marland, governor-elect of Oklahoma, to consider matters relating to an interstate compact for oil producing states, adopted unanimously a resolution requesting Congress to pass legislation permitting the states to enter into an interstate compact for the conservation of petroleum and the prevention of waste of petroleum and also providing that the legislatures of the states be submitted a bill authorizing the representatives of the states to meet and adopt a compact along those lines.

The action of the eight states came after telegrams had been received from William P. Cole, Jr., chairman of the subcommittee of the Interstate and Foreign Commerce Committee of the national House of Representatives, which recently completed an extensive investigation of the petroleum industry. These telegrams impressed the conference with the vital importance of the oil producing states' taking action on the matter of an interstate compact. Mr. Cole said "We strongly urge upon the oil producing states the adoption of state compacts to deal with the problems of the production of petroleum with which the individual states are powerless to cope." He further stated state compacts is an ideal solution of those problems of petroleum production which cannot be solved by modification of the law of capture and other legislation operating within state boundaries.

Texas Favors Compact

Realizing from the telegrams sent by Chairman Cole that the Congressional committee was waiting action by the governors' conference before making a report to Congress on the matter of proposed legislation for the petroleum industry, every effort was made by the representatives present from the eight states—Texas, Oklahoma, Louisiana, Arkansas, California, New Mexico, Kansas and Illinois—to reach a common understanding on the matter of an interstate compact and, also, to take those steps which would provide the quickest way of forming such a compact and making it effective.

The first object was achieved by the unanimous adoption of the following resolution:

"Resolved: That the Congress be requested to pass legislation permitting the oil producing states to enter into an interstate compact for the conservation of petroleum and the prevention of waste of this natural resource.

"Be it further resolved: That the legislatures of the various oil producing states be submitted a bill, authorizing representatives of the States to meet and adopt a compact for the purpose of the conservation of the petroleum resources of the states and the prevention of waste of these petroleum resources."

James V. Allred, governor-elect of Texas, who was prevented from attending the conference by illness, had the resolution read to him over the telephone and he approved it and authorized his representative at the meeting, Jack Blalock, to vote for its adoption.

The sense of the meeting seemed to be expressed by Mr. Marland when he said: "The telegrams from Mr. Cole show the importance of this conference. We of the oil producing states are going to be given an opportunity to regulate our own affairs. If we don't, Congress will do it for us."

The action of Texas in approving the resolution quoted above was an effective answer to statements which had been made previously in many quarters to the effect Texas never would become a party to an interstate compact. This action made many, heretofore doubtful, feel quick action will be taken by the different oil producing states to have Congress grant permission for the states to formulate and make effective such a compact and that the states themselves will provide in a short time after such permission is granted, the necessary machinery for carrying into effect this permission.

Allred's Position

The position of Governor-Elect Allred of Texas on matters affecting the petroleum industry was stated by Jack Blalock, Mr. Allred's representative at the governors' conference, to be as follows:

"He is unalterably opposed to federal control, or regulation of the production of crude petroleum within the boundaries of the State of Texas.

"He favors the enactment by Congress into permanent legislation of Section 9-C of the National Industrial Recovery Act.

"He favors the limitation by Congress of the importation of crude petroleum into the United States.

"He favors the prevention of physical waste of crude petroleum in Texas, and feels that Texas has ample laws to prevent waste of this natural resource. It is his purpose to see that these laws are properly enforced.

"If Congress deems it advisable for the states to co-operate in the conservation of crude petroleum and if Congress sees fit to permit states to enter into a compact, it is his thought that said grant should contain the following provisions:

"(a) Said grant should be permissive only.

(b) Said permissive grant should confine the states to the consideration of conservation, that is to say, the prevention of physical waste of its natural resources.

"(c) Said permissive grant should recognize that the right to control the production of crude petroleum is a matter exclusively within the jurisdiction of the several producing states.

"(d) Said permissive grant should specifically prohibit the states from entering into any compact which has as its purpose price fixing, the creation or perpetration of monopoly or regimentation."

Representatives of Louisiana and Arkansas apparently favored the position outlined by Mr. Allred and these states voted with Texas against the resolution and suggested draft of legislation to be presented to the different state legislatures, which resolution and draft was presented to the conference by Mr. Marland and adopted by the conference by a vote of 5 to 3, Oklahoma, California, New Mexico, Kansas and Illinois favoring the suggested legislation and Texas, Louisiana and Arkansas voting against the draft as a whole. Representatives of the latter three states, however, made it clear they favored those sections of the proposed legislation which would limit imports and prevent shipment in interstate commerce of petroleum or its products produced and manufactured in excess of state allocations.

Resolution and Draft of Statute

The resolution and draft of the suggested state statute adopted by the conference by the vote of 5 to 3 follows:

"Whereas, a subcommittee of the House Committee on Interstate and Foreign Commerce, acting pursuant to H. Res. 441, Seventy-third Congress, has recommended to the Congress that the enactment of federal legislation for regulation of the oil industry be withheld temporarily to give an opportunity for the oil-producing states to effect an interstate agreement for the conservation of oil and stabilization of production thereof, and

"Whereas, it is preferable that the states, through the exercise of their police powers in co-operation with each other and the federal Government, shall meet this problem rather than surrender their sovereign function in favor of centralized federal control, and

"Whereas, it is desirable that the negotiation of an interstate agreement shall

(Continued on Page 37)

Opinions in Texas and Washington Agree That Shipment Regulation Will Continue

WASHINGTON, D. C., Jan. 8.—Administrator Ickes commenting on the decision of the Supreme Court invalidating Section 9(c) of the Recovery Act intimated that he and Representative Cole, chairman of the oil investigating committee, might confer later in the day about some substitute for the invalid section which would be rushed through Congress.

C. B. Watson of the Pure Oil Co. and a member of the Refinery Board of Review, stated that it was his opinion that a temporary measure containing provisions along the lines of Section 9(c) would be almost immediately passed by Congress and that within 90 days a permanent oil control bill would be enacted by that body. The danger of this, he stated, was that the bill might go further than crude oil production, which, in the opinion of others, would probably spell the defeat of such legislation.

J. D. Collett, chairman of the Planning and Coordination Committee, believes the administration will press for a temporary bill to get the results wanted under Section 9 (c), but that the new law will be so worded, and whatever delegation is necessary will be so limited, that the law will be upheld by the courts.

It is his opinion that due to the improved laws, and the great improvement in the general conditions in Texas, and because of the avowed intention of the state officials to enforce the law and control the industry to the best of their abilities that a crisis within the State, which would be of national concern, will be averted. He does not believe there will be any breakdown in the State.

Representative Cole, of the investigating committee, called his committee together this morning and went over the situation with them, but because some of the members had not had the opportunity to read the decision, the committee adjourned without coming to any conclusion. It is expected some concrete recommendation will be forthcoming late today, or tomorrow.

Opinion generally is that if the State of Texas controls the situation there, which the officials have stated they intend to, it will demonstrate to the federal authorities that no oil control law is necessary. It is believed it will be the best argument yet proposed as to why no necessity exists for passage by Congress of such an act.

Administrator Ickes in commenting on the fact that the Federal Tender Board had been abolished by the decision said the organization will be transferred to the Petroleum Administrative Board and will be assigned to duties as a branch of that board in Texas. Headquarters will be at Tyler and Kilgore.

"While we intend to do the best we can with the means available to us, the basic remedy rests with Congress," the administrator said. "The decision of the court emphasizes the necessity for specific and adequate legislation to effectuate a rational conservation program designed to prevent the waste of oil and gas resources and to prevent the demoralization of one of our largest basic industries."

Wirt Franklin, president of the Independent Petroleum Association of America, said:

"Early action will be necessary if Congress intends to restore federal authority to prevent hot oil shipments which has been wiped out by the decision. It is hoped the oil states will demonstrate their effectiveness in preventing production in excess of consumptive demand to the demoralization of the industry. Those states with proration laws have the machinery by which production can be kept within proper limits. This has been demonstrated in the past. Prompt and efficient work by the state authorities will now prove of inestimable value to the entire domestic petroleum industry."

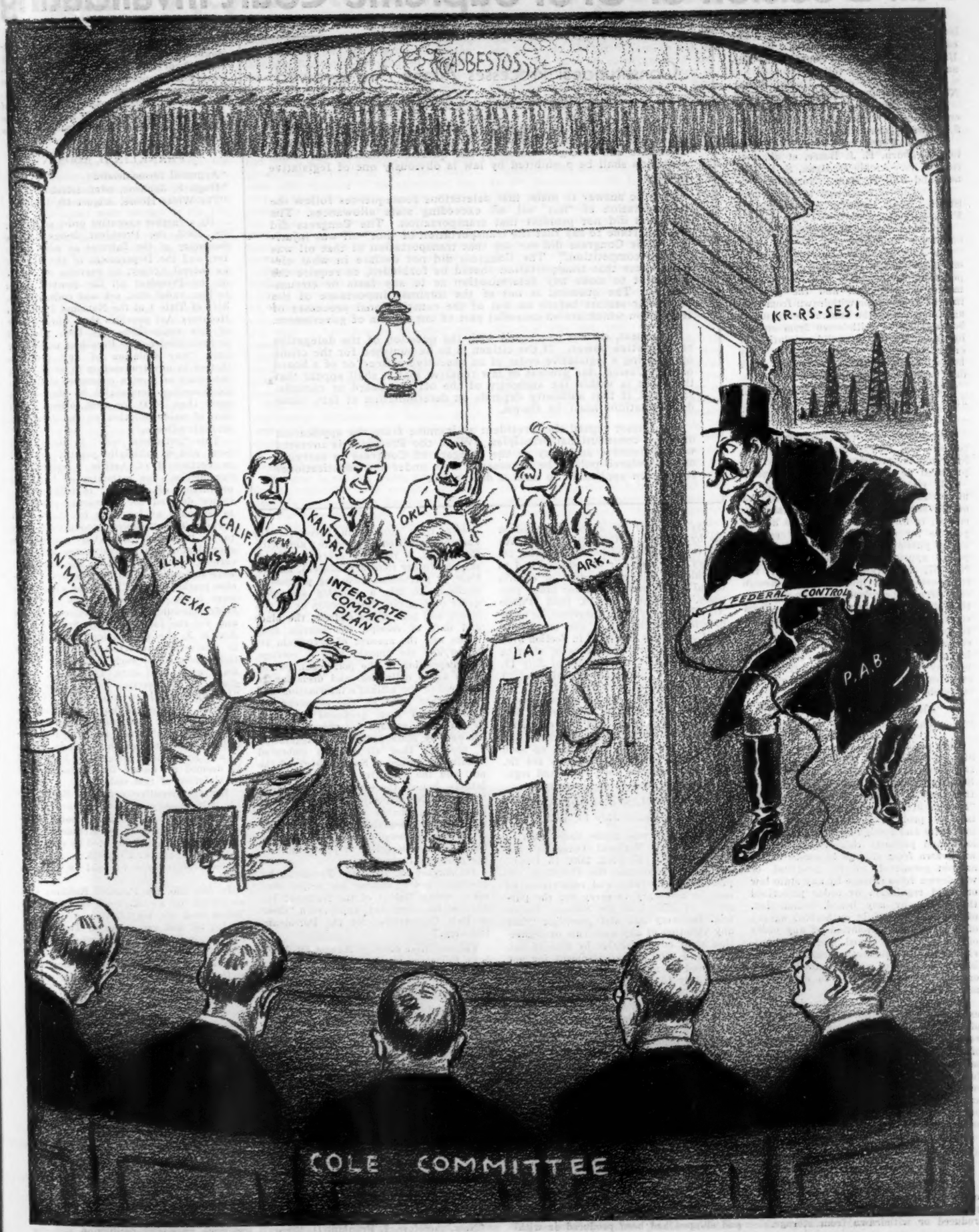
ALLRED'S OPINION

AUSTIN, Tex., Jan. 7.—Governor-elect James V. Allred, in a statement tonight, announced the state's power to deal with oil was unaffected by the decision of the supreme court in the Panama-Amazon cases. Mr. Allred predicted that Congress will re-enact Section 9(c) as a specific prohibition against interstate movements, instead of merely seeking to delegate the power to the President.

"The State of Texas can and will enforce its law against the movement of

(Continued on Page 32.)

Foiled Again



—Drawn exclusively for The Oil and Gas Journal

Full Decision of U. S. Supreme Court Invalidating

WASHINGTON, D. C., Jan. 7.—The complete text of the decision by the United States Supreme Court in the Amazon-Panama cases follows:

Supreme Court of the United States. Nos. 135 and 260—October term, 1934.

Panama Refining Co., et al., petitioners, vs. A. D. Ryan, H. D. Bennett and J. Howard Marshall. No. 135.

Amazon Petroleum Corporation, Barney Cockburn, E. J. Boase, et al., petitioners, vs. Archie D. Ryan, S. D. Bennett and Phil E. Baer. No. 260.

On writs of certiorari to the United States Circuit Court of Appeals for the Fifth Circuit.

Mr. Chief Justice Hughes delivered the opinion of the court.

On July 11, 1933, the President, by executive order, prohibited "the transportation in interstate and foreign commerce of petroleum and the products thereof produced or withdrawn from storage in excess of the amount permitted to be produced or withdrawn from storage by any state law or valid regulation or order prescribed thereunder, by any board, commissioner, officer, or other duly authorized agency of a state."

The full text of the executive order of July 11, 1933, is as follows:

"EXECUTIVE ORDER

"Prohibition of transportation in interstate and foreign commerce of petroleum and the products thereof unlawfully produced or withdrawn from storage.

"By virtue of the authority vested in me by the Act of Congress entitled 'An act to encourage national industrial recovery, to foster fair competition and to provide for the construction of certain useful public works, and for other purposes,' approved June 16, 1933 (Public No. 67, Seventy-third Congress), the transportation in interstate and foreign commerce of petroleum and the products thereof produced or withdrawn from storage in excess of the amount permitted to be produced or withdrawn from storage by any state law or valid regulation or order prescribed thereunder, by any board, commission, officer, or other duly authorized agency of a state, is hereby prohibited.

"FRANKLIN D. ROOSEVELT.

"The White House, July 11, 1933."

This action was based on Section 9(c) of Title 1 of the National Industrial Recovery Act of June 16, 1933 (48 Stat. 195, 200, 15 U.S.C. T.I.T. 1), Section 709(c). That Section provides "Section 9(c) The President is authorized to prohibit the transportation in interstate and foreign commerce of petroleum and products thereof produced or withdrawn from storage in excess of the amount permitted to be produced or withdrawn from storage by any state law or valid regulation or order prescribed thereunder, by any board, commission, officer, or other duly authorized agency of a state. Any violation of any order of the president issued under the provisions of this subsection shall be punishable by fine of not to exceed $1,000, or imprisonment for not to exceed six months, or both."

On July 14, 1933, the President, by executive order, authorized the Secretary of the Interior to exercise all the powers vested in the President "for the purpose of enforcing Section 9(c) of said act and said order" of July 11, 1933, "including full authority to designate and appoint such agents and to set up such boards and agencies as he may see fit, and to promulgate such rules and regulations as he may deem necessary."

The executive order of July 14, 1933, is as follows:

"EXECUTIVE ORDER

"Prohibition of transportation in interstate and foreign commerce of petroleum and the products thereof unlawfully produced or withdrawn from storage.

Constitutional Processes Alone Are Involved in the Court's Conclusions

Assuming for the present purpose, without deciding, that the Congress has power to interdict the transportation of that excess in interstate and foreign commerce, the question whether that transportation shall be prohibited by law is obviously one of legislative policy.

It is no answer to insist that deleterious consequences follow the transportation of "hot" oil, oil exceeding state allowances. The Congress did not prohibit that transportation. The Congress did not undertake to say that the transportation of "hot" oil was injurious. The Congress did not say that transportation of that oil was "unfair competition." The Congress did not declare in what circumstances that transportation should be forbidden, or require the President to make any determination as to any facts or circumstances. The question is not of the intrinsic importance of the particular statute before us, but of the constitutional processes of legislation which are an essential part of our system of government.

To repeat, we are concerned with the question of the delegation of legislative power. If the citizen is to be punished for the crime of violating a legislative order of an executive officer, or of a board or commission, due process of law requires that it shall appear that the order is within the authority of the officer, board or commission, and, if that authority depends on determination of fact, those determinations must be shown.

We cannot regard the President as immune from the application of these constitutional principles. When the President is invested with legislative authority as the delegate of Congress in carrying out a declared policy, he necessarily acts under the constitutional restriction applicable to such a delegation.

"By virtue of the authority vested in me by the Act of Congress entitled 'An act to encourage national industrial recovery, to foster fair competition and to provide for the construction of certain useful public works, and for other purposes,' approved June 16, 1933 (Public No. 67, Seventy-third Congress), in order to effectuate the intent and purpose of the Congress as expressed in Section 9(c) thereof, and for the purpose of securing the enforcement of my order of July 11, 1933, issued pursuant to said act, I hereby authorize the Secretary of the Interior to exercise all the powers vested in me, for the purpose of enforcing Section 9(c) of said act and said order, including full authority to designate and appoint such agents and to set up such boards and agencies as he may see fit, and to promulgate such rules and regulations as he may deem necessary.

"FRANKLIN D. ROOSEVELT.

"The White House, July 14, 1933."

That order was made under Section 10(a) of the National Industrial Recovery Act (48 Stat. 200, 15 U.S.C. 710[a]), authorizing the President "to prescribe such rules and regulations as may be necessary to carry out the purposes" of Title 1 of the National Industrial Recovery Act and providing "that any violation of any such rule or regulation shall be punishable by fine of not to exceed $500 or imprisonment for not to exceed six months or both."

On July 15, 1933, the Secretary of the Interior issued regulations to carry out the President's orders of July 11 and 14, 1933. These regulations were amended by orders of July 25, 1933, and August 21, 1933, prior to the commencement of these suits. Regulation 4 provided, in substance, that every producer of petroleum should file a monthly statement under oath, beginning August 15, 1933, with the Division of Investigations of the Department of the Interior giving information with respect to the residence and post office address of the producer, the location of his producing properties and wells, the allowable production as prescribed by State authorities, the amount of daily production, all deliveries of petroleum and declaring that no part of the petroleum or products produced and shipped had been produced or withdrawn from storage in excess of the amount permitted by state authority. Regulation 5 required every purchaser, shipper (other than a producer), and refiner of petroleum, including processors, similarly to file a monthly statement under oath, giving information as to residence and post office address, the place and date of receipt, the parties from whom and the amount of petroleum received and the amount held in sotrage, the disposition of the petroleum, particulars as to deliveries, and declaring to the best of the affiant's information and belief, that none of the petroleum so handled had been produced or withdrawn from storage in excess of that allowed by state authority. Regulation 7 provided that all persons embraced within the terms of Section 9(c) of the act, and the executive orders and regulations issued thereunder, should keep "available for inspection by the Division of Investigations of the Department of the Interior adequate books and records of all transactions involving the production and transportation of petroleum and the products thereof."

On August 19, 1933, the President, by executive order, stating his action was taken under Title 1 of the National Industrial Recovery Act, approved a "Code of Fair Competition for the Petroleum Industry."

The executive order of August 19, 1933, is as follows:

"EXECUTIVE ORDER

"Code of fair competition for the petroleum industry.

"An application having been duly made, pursuant to and in full compliance with the provisions of Title 1 of the National Industrial Recovery Act, approved June 16, 1933, for my approval of a code of fair competition for the petroleum industry, and hearings having been held thereon and the administrator having rendered his report together with his recommendations and findings with respect thereto, and the administrator having found that the said code of fair competition complies in all respects with the pertinent provisions of Title 1 of said act and that the requirements of Clauses (1) and (2) of Subsection (a) of Section 3 of said act have been met:

"Now, therefore, I, Franklin D. Roosevelt, President of the United States, pursuant to the authority vested in me by Title 1 of the National Industrial Recovery Act, approved June 16, 1933, and otherwise, do adopt and approve the report, recommendations and findings of the administrator and do order that the said code of fair competition be and it is hereby approved.

"FRANKLIN D. ROOSEVELT.

"Approval recommended:
"Hugh S. Johnson, administrator.
"The White House, August 19, 1933."

By a further executive order of August 28, 1933, the President designated the Secretary of the Interior as administrator, and the Department of the Interior as federal agency, to exercise on behalf of the President all the powers vested in him under that act and code. Section 3(f) of Title 1 of the National Industrial Recovery Act provides that when a code of fair competition has been approved or prescribed by the President under that title, "any violation of any provision thereof in any transaction in or affecting interstate or foreign commerce shall be a misdemeanor, punishable by fine of not more than $500 for each offense, each day of said violation to be deemed a separate offense."

This "petroleum code" in its original form and as officially printed provided in Section 3 of Article 3 relating to "production" for estimates of "required production of crude oil to balance consumer demand for petroleum products" to be made at intervals by the federal agency. This "required production" was to be "equitably allocated" among the several states. These estimates and allocations, when approved by the President, were to be deemed to be "the net reasonable market demand" and the allocations were to be recommended "as the operating schedules for the producing states and for the industry." By Section 4 of Article 3, the subdivision, with respect to producing properties, of the production allocated to each state, was to be made within the state. The second paragraph of that section further provided: "If any subdivision into quotas of production allocated to any state shall be made within a state any production by any person, as person is defined in Article 1, Section 3 of this code in excess of any such quota assigned to him, shall be deemed an unfair trade practice and in violation of this code."

By an executive order of September 13, 1933, modifying certain provisions of the petroleum code, this second paragraph of Section 4 of Article 3 was eliminated. It was reinstated by executive order of September 25, 1934.

Those suits were brought in October, 1933.

In No. 135, the Panama Refining Co., as owner of an oil refining plant in Texas and its co-plaintiff, a producer having oil and gas leases in Texas, sued to restrain the defendants, who were federal officials, from enforcing Regulations 4, 5 and 7 prescribed by the Secretary of the Interior under Section 9(c) of the National Industrial Recovery Act. Plaintiffs attacked the validity of Section 9(c) as an unconstitutional delegation to the President of legislative power and as transcending the authority of the Congress under the commerce clause. The regulations, and the attempts to enforce them by coming upon the properties of the plaintiffs, gauging their tanks, digging up pipe lines, and otherwise, were also assailed under the Fourth and Fifth amendments to the Constitution.

In No. 260, the Amazon Petroleum Corp., and its co-plaintiffs, all being oil producers in Texas and owning separate properties, sued to enjoin the Railroad Commission of that state, its members and other state officers, and the other defendants who were federal officials, from enforcing the state and federal restrictions upon the production and dis-

Section 9(c) of Recovery Act; Code Untouched

position of oil. The bill alleged that the legislation of the state and the orders of its commission in curtailing production violated the Fourteenth amendment of the federal Constitution. As to the federal requirements, the bill not only attacked Section 9(c) of the National Industrial Recovery Act and the regulations of the Secretary of the Interior thereunder, upon substantially the same grounds as those set forth in the bill of the "Panama Refining Co." but also challenged the validity of provisions of the petroleum code. While a number of these provisions were set out in the bill, the contest on the trial related to the limitation of production through the allocation of quotas pursuant to Section 4 of Article 3 of the code.

As the case involved the constitutional validity of orders of the State Commission and interlocutory injunction was sought, a court of three judges was convened under Section 266 of the judicial code (28 U.S. C. 380). That court decided that the cause of action against the federal officials was not one within Section 266 but was for the consideration of the district judge alone. The parties agreed that the causes of action should be severed and that each cause should be submitted to the tribunal having jurisdiction of it. Hearing was had both on the applications for interlocutory injunction and upon the merits. The court of three judges, sustaining the state orders, denied injunction and dismissed the bill as against the state authorities. 5 F. Supp. 633, 634, 639.

In both cases against the federal officials, that of the Panama Refining Co. and that of the Amazon Petroleum Corp., heard by the district judge, a permanent injunction was granted (5 F. Supp. 639). In the case of the Amazon Petroleum Corp., the court specifically enjoined the defendant from enforcing Section 4 of Article 3 of the petroleum code, both plaintiffs and defendants, and the court, being unaware of the amendment of September 13, 1933.

The Circuit Court of Appeals reversed the decrees against the federal officials and directed that the bills be dismissed (71 F. (2d) 1, 8. The cases came here on writs of certiorari granted on October 8, 1934.

First the controversy with respect to the provision of Section 4 of Article 3 of the petroleum code was initiated and proceeded in the courts below upon a false assumption. That assumption was that this Section still contained the paragraph (eliminated by the executive order of September 13, 1933) by which production in excess of assigned quotas was made an unfair practice and a violation of the code. Whatever the cause of the failure to give appropriate public notice of the change in the section, with the result that the persons affected, the prosecuting authorities, and the courts, were alike ignorant of the alteration, the fact is that the attack in this respect was upon a provision which did not exist. The Government's announcement that, by reason of the elimination of this paragraph, the Government "cannot and therefore it does not intend to, prosecute petitioners or other producers of oil in Texas, criminally or otherwise, for exceeding, at any time prior to September 25, 1934, the quotas of production assigned to them under the laws of Texas," but that if "petitioners, or other producers, produce in excess of such quotas after September 25, 1934, the Government intends to prosecute them," cannot avail to import into the present case the amended provision of that date.

The Government states that although the second paragraph of Section 4 of Article 3 was a part of the code for a short period prior to September 13, 1933, no legal basis exists for prosecution in Texas during that period.

The case is not one where a subsequent law is applicable to a pending suit and controls its disposition. See United States vs. The Schooner Peggy, 1 Cranch, 103, 109, 110; Dinsmore vs. Southern Express Co., 183 U.S. 115, 120; Crozier vs. Krupp, 224 U.S. 290, 302; Gulf, Colorado & Santa Fe Ry. Co. vs. Dennis, 224 U.S. 503, 507; Watts vs. Union Austriaca, 248 U.S. 9, 21; Duplex Printing Press Co. vs. Derring, 254 U.S. 443, 464; American Foundries vs. Tri City Council, 257 U.S. 184, 201; Texas Co. vs. Brown, 258 U.S. 466, 474.

When this suit was brought, and when it was heard, there was no cause of action for the injunction sought with respect to the provision of Section 5 of Article 3 of the code; as to that, there was no basis for real controversy. See California vs. San ablo, 149 U.S. 308, 314; United States vs. Alaska Steamship Co., 253 U.S. 113, 116; Berker Co. vs. Painters' Union, 281 U.S. 462. If the Government undertakes to enforce the new provision, the petitioners, as well as others, will have an opportunity to present their grievance, which can then be considered, as it should be, in the light of the facts as they will then appear.

For this reason, we pass to the other questions presented and we express no opinion as to the interpretation or validity of the provisions of the petroleum code.

Second. Regulations 4, 5 and 7, issued by the Secretary of the Interior prior to these suits, have since been amended. But the amended regulations continue substantially the earlier requirements, and expand them. They present the same constitutional questions, and the cases as to these are not moot. Southern Pacific Company vs. Interstate Commerce Commission, 219 U.S. 433, 452; Southern Pacific Terminal Co. vs. Interstate Commerce Commission, 219 U.S. 498, 514-516; McGrain vs. Daugherty, 273 U.S. 135, 181, 182.

The original regulations of July 15, 1933, as amended July 25, 1933, and August 21, 1933, were issued to enforce the executive orders of July 11, and July 14, 1933. The executive order of July 11, 1933, was made under Section 9(c) of the National Industrial Recovery Act, and the executive order of July 14, 1933, under Section 10(a) of that act, authorizing the Secretary of the Interior to promulgate regulations, was for the purpose of enforcing Section 9(c) and the executive order of July 11, 1933. The amended regulations have been issued for the same purposes. The fundamental question as to these regulations thus turned upon the validity of Section 9(c) and the executive orders to carry it out.

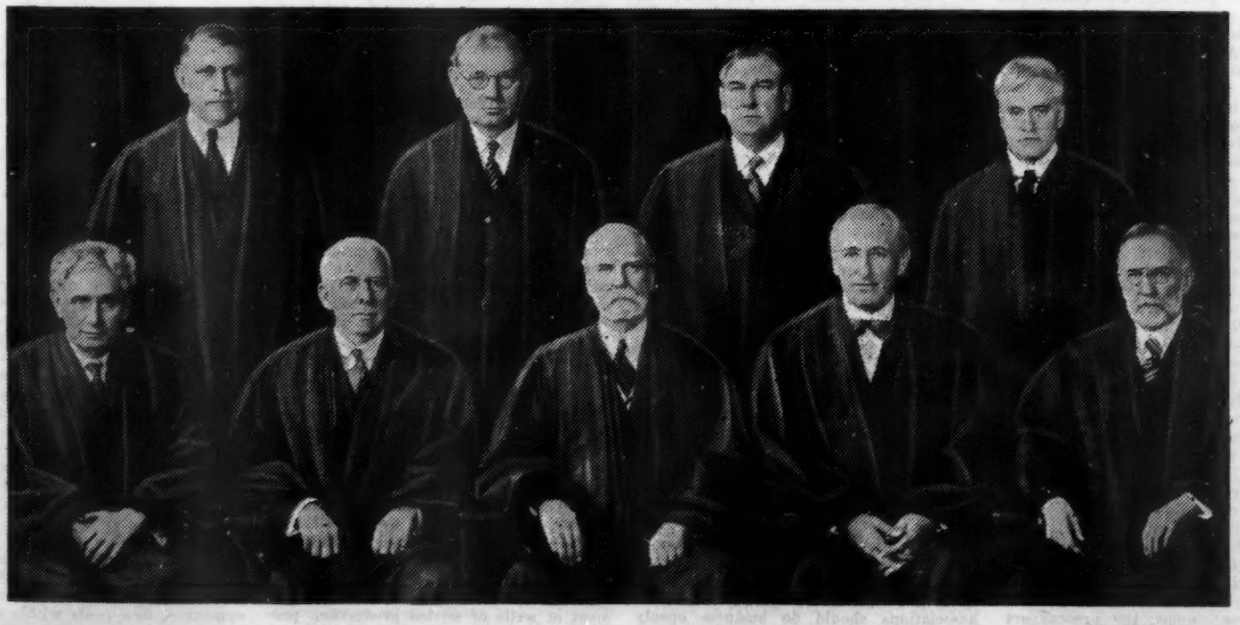
Third. The statute provides that any violation of any order of the president issued under Section 9(c) shall be punishable by fine of not to exceed $1,000 or imprisonment for not to exceed six months, or both. We think that these penalties would attach to each violation, and in this view the plaintiffs were entitled to invoke the equitable jurisdiction to restrain enforcement, if the statute and the executive orders were found to be invalid. Philadelphia Company vs. Stimson, 223 U.S. 605, 620, 621; Terrace vs. Thompson, 263 U.S. 197, 214-216; Hygrade Provision Co. vs. Sherman, 266 U.S. 497, 499, 500.

Fourth. Section 9(c) is assailed upon the ground that it is an unconstitutional delegation of legislative power. The section purports to authorize the President to pass a prohibitory law. The subject to which this authority relates is defined. It is transportation in interstate and foreign commerce of petroleum and petroleum products which are produced or withdrawn from storage in excess of the amount permitted by state authority. Assuming for the present purpose, without deciding, that the Congress has power to interdict the transportation of that excess in interstate and foreign commerce, the question whether that transportation shall be prohibited by law is obviously one of legislative policy. Accordingly, we look to the statute to see whether the Congress has declared a policy with respect to that subject; whether the Congress has set up a standard for the President's action; whether the Congress has required any finding by the President in the exercise of the authority to enact the prohibition.

Section 9(c) is brief and unambiguous. It does not attempt to control the production of petroleum and petroleum products within a state. It does no seek to lay down rules for the guidance of state legislatures or state officers. It leaves to the states and to their constituted authorities the determinaion of what production shall be permitted. It does not qualify the President's authority by reference to the basis, or extent, of the state's limitation of production. Section 9(c) does not state whether, or in what circumstances or under what conditions, the President is to prohibit the transportation of the amount of petroleum or petroleum products produced in excess of the state's permission. It establishes no criterion to govern the President's course. It does not require any finding by the President as a condition of his action. The Congress in Section 9(c) thus declared no policy as to the transportation of the excess production. So far as this section is concerned, it gives to the President an unlimited authority to determine the policy and to lay down the prohibition, or not to lay it down, as he may see fit. And disobedience to his orders is made a crime punishable by fine and imprisonment.

We examine the context to ascertain if it furnishes a declaration of policy or a standard of action, which can be

(Continued on Page 33)



(c) H E

The Supreme Court of the United States. Standing, left to right: Associate Justices Roberts, Butler, Stone and Cardozo. Seated, Associate Justices Brandies, Van Devanter, Chief Justice Hughes and Associate Justices McReynolds and Sutherland.

Proposed Constitutional Amendment Already Introduced in Congress

By HUGH D. MALLON
Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., Jan. 7.—With Congress in session less than a week legislation which will vitally affect, not only the petroleum industry, but all industry, is being proposed. The Federal Trade Commission has submitted its recommendations to Congress for broader powers under the Federal Trade Commission Act. A proposed constitutional amendment has been introduced into the Senate which would give the federal Government almost unlimited power over industry, and the Independent Petroleum Association of America has submitted resolutions to Congress asking for permanent regulation of the oil industry.

That part of the Federal Trade Commission's recommendations which will be felt most readily if enacted into law, is contained in the proposal to amend the act by declaring that "unfair methods of competition in or affecting commerce, and unfair or deceptive acts and practices in or affecting commerce are declared unlawful."

This recommendation is followed by the following proposed amendment which declares: "The commission is empowered and directed to prevent persons, partnerships, or corporation, except banks and common carriers subject to the acts to regulate commerce, from using unfair methods of competition in or affecting commerce and unfair or deceptive acts and practices in or affecting commerce."

Chain Store Investigation

These recommendations were brought up after an extensive investigation of chain stores and their effect on business and commerce generally. The commission says in its report: "A recommendation for amendment of the Federal Trade Commission Act seems essential as shown by the results of the chain store investigation; namely, first, that the prohibition of unfair methods of competition in Section 5 of the act be broadened so as to include unfair or deceptive acts and practices in interstate commerce, and, second, so that unfair methods, acts and practices may be reached when they unfairly affect interstate commerce, regardless of whether the offender is engaged in commerce, or the acts are done in the course of commerce."

These two proposed amendments, which affect Section 5 of the act, are for the purpose of "broadening the commission's jurisdiction so as to include unfair methods of competition affecting commerce, and unfair, or deceptive act and practices in or affecting commerce." In many of its investigations the commission has found numerous unfair methods of competition and numerous deceptive acts and practices which, although done in intrastate commerce, seriously affect honest competitors engaged in interstate commerce. The commission's jurisdiction, if any, under Section 5, as it now stands, over these acts and practices is doubtful. The proposed amendment expressly extends its jurisdiction so as to prohibit them. Moreover, under the present act it has been intimated in court decisions that the commission may lose jurisdiction of a case of deceptive and similar unfair practices if it should develop in the proceeding that all competitors in the industry practiced the same unfair methods, and the commission may be ousted from its jurisdiction no matter how badly the public may be in need of protection from said deceptive and unfair acts. Under the amendment to this section the commission would have jurisdiction to stop the exploitation or deception of the public even though the competitors of the respondent were themselves entitled to no protection because of their engaging in similar practices.

Prices Based on Quantity

Another phase of the legislative recommendations of the commission, will if enacted by Congress, be felt by major companies, as well as by some of the smaller integrated companies. These are proposed amendments to the Clayton Act, one of which would prohibit concerns which make different prices to different buyers from asserting a right to do so merely on account of the difference in quantity, or quantities, sold. The practice of giving a large buyer proportionately large discounts has been recognized as a powerful instrument in building up monopoly, the commission says. Different prices are justified only on actual difference in costs, they continue. Under the proposed amendment the prices charged would have to be reasonably related to the differences in costs, and could not be so great as to produce an unfair, or unjust discrimination, it is explained in the report.

Another proposed amendment to the Clayton Act covers two points, the first of which is to make effective the policy of the law as now written, and secondly, to make it a more effective obstacle to what the commission alleges is "the steady trend toward monopoly." The elimination of competition between corporations brought about solely by the purchase of assets is not now illegal unless the corporations involved unreasonably restrain commerce in the whole industry.

The proposed amendments are not only intended to make clear that competition between individual units is to be maintained, but also to dispense with the necessity of having to prove a substantial lessening of competition between competing corporations in instances where all, or a controlling stock interest, or all, or a major part of the assets have been acquired.

These proposals of the Federal Trade Commission for additional legislation to bulwark the existing law are claimed to presage the start of a fight for control of whatever is enacted in the form of permanent legislation in place of the National Industrial Recovery Act. The views expressed are at variance with the opinions of Donald Richberg, former general counsel of the National Recovery Administration and now chairman of the National Recovery Board. His opinion is that industry, through competent trade associations should do business openly and furnish full information concerning their activities to some agency, either the National Recovery Administration, or some agency combining some of the functions of both the NRA and the Federal Trade Commission.

Labor Amendment

Senator Edward Costigan, Democrat of Colorado, has introduced into the Senate a proposed constitutional amendment, which, it is claimed, would insure some phases of the New Deal from defeat by the courts of the United States, if adopted. The measure provides that the federal Government shall have the power and authority to set minimum wages for employes, maximum hours of labor, and generally rule on all unfair trade practices.

This proposed amendment would also contain a clause which would restrict the "due process clause" of the United States Constitution as applied to any action taken under this constitutional amendment. Such a defense would be overruled if set up against an action under this provision of the constitution, if it is adopted.

There would, apparently, be no recourse from any order, rule or regulation promulgated pursuant to this proposed legislation. The President, through his legally authorized agent, would be the judge, jury and prosecuting attorney of any controversy arising under its terms.

Specific recommendations for legislation affecting the oil industry have been recommended to Congress by the Independent Petroleum Association of America. Two petitions to the Senate have been incorporated into the record of that body, and one petition to the House of Representatives has been inserted in the Congressional Record. In all three instances the recommendations have been referred to committees for whatever action is deemed necessary by those bodies.

One of the petitions recites that "the oil industry faces a critical situation in view of the fact that the producing capacity of the various petroleum producing properties of the United States, plus the imports, are in excess of the consumptive and export demand for crude petroleum and its products in the United States, due to the fact that crude petroleum is being produced in the United States in excess of the federal allocations and that imports of crude petroleum and its products are in excess of the quantities prescribed in the executive order of the petroleum administrator."

Waste and National Defense

A stabilized condition in the petroleum industry is thereby prevented, it is claimed in the proposal, which results in excessive losses to all branches of the industry and creates a condition of unemployment in the oil and its affiliated industries with lowered wage scale.

Excessive production causes surface, underground, and economic waste, it is claimed, and results in the rapid depletion of flush fields, premature abandonment of wells of settled production, prevents the conservation of an ample and inexpensive supply of petroleum which is an exhaustible natural resource, essential to national defense. National defense is dependent upon petroleum and its products for fuel, power and lubrication. Demoralization of the industry through overproduction, it is claimed, tends to develop monopoly, to the ultimate detriment of the consumer.

For these reasons the Independent Petroleum Association of America favors the support of federal legislation necessary to accomplish the principles and policies of limiting imports of crude petroleum and its products to a fixed percentage of the total federal production allocation in the United States, this fixed percentage to be based on the ratio that the total average daily imports for the last half of 1932 bears to the average daily production allocation (which shall include storage withdrawals) for the United States for the past 12 months as fixed by the federal agency with the understanding that the total imports in any three months' period shall not exceed this percentage; that the federal Government allocate quotas of crude oil for movement in commerce with the understanding that so long as the state regulatory body in any state keeps the production in that state within the federal allocation the state regulatory shall have exclusive contral within the state, but if the state overproduces its quota the federal agency shall then have the authority to control and regulate shipments in commerce and production within the state.

Creation of Federal Agency

Limitation of withdrawals from storage, orderly development of new pools by a majority of operators in the area, adequate penalties for the violation of any provision of the proposed legislation, and the creation of a federal agency composed of either five, or seven members, to administer the law (the Secretary of the Interior to be chairman of this body and either four or six members to be appointed by the President from experienced oil men from various sections of the country so as to give proper and adequate recognition to all producing regions of the country) is also recommended.

The association also favors the inclusion in any federal legislation that may be enacted a provision for the authorization by Congress of an interstate compact between oil producing states for the proper control of production within these states and further providing that when any two or more oil producing states enter into such a compact they shall be excluded from the provision of such federal legislation so long as said compact states keeps their total production within the compined federal allocation to those states.

The association further recommends that in any interstate compact between the oil states there be included adequate provisions for the planned orderly development of new pools within the compact states.

These recommendations are somewhat similar to Thomas-Disney bill.

Directional Well Is Successfully Employed to Subdue Stubborn Fire

By NEIL WILLIAMS

HOUSTON, Tex., Jan. 7.—Sinclair Prairie Oil Co.'s burning crater well which has been running wild in the Seeligson Field near Premont in southern Jim Wells County, Southwest Texas, for the past two and a half months, was killed successfully Friday night, January 4. The well, No. 1 Seeligson, ceased its flow and the blaze went out at 5:10 o'clock, a little over two hours after the pumping of water was started into the producing sand through a "relief" well, No. 1-A Seeligson, which had been drilled with its hole deflected to a point in the sand within a few feet of the wild well.

The accuracy of the marksmanship in the directional drilling of the relief well is indicated by the short period required to kill the crater producer after the pumping of water into the sand was started. Pumping was started at 3 o'clock Friday afternoon with two pumps compounded. Circulation was established in three minutes when pressure was built up to 1,200 pounds. One pump then was cut out and the remaining pump maintained circulation, injecting water at the rate of 100 bbls. per hour. It was not long before the burning well began to die down and at 5:10 o'clock the fire went out and the well was quiet.

Within Five Feet

It is calculated that the bottom of the relief well is within 5 feet of the hole of the well killed. Surface location is 386 feet south 35° 44′ east of the center of the crater. Considering the comparatively shallow depth of the sand and consequent short drilling distance for the deflection the marksmanship seems to be an achievement of particular note. Measured depth of the relief well is 2,405 feet, which places the bottom of the hole in the sand at a calculated true vertical depth of 2,361.36 feet.

Drilling of the relief well was done with Sinclair Prairie Oil Co. crews under the direct supervision of the H. John Eastman Co., a company of whipstocking and well surveying specialists. Bits, whipstocks and hole surveying cameras of the latter company were used and W. G. James, resident engineer at Houston and vice president of the company, was personally on the job at all times. Todd Williams was the Sinclair toolpusher in charge. James D. Hughes, president of the Eastman Co. of Texas at Houston also was directly in touch with the job.

Sinclair Prairie Oil Co.'s No. 1 Seeligson, crater well in the Seeligson Field, Jim Wells County, Southwest Texas, which blew wild on fire for two and a half months before being killed January 4.

The Sinclair wild well is the second in this country which has been killed by the drilling of a relief well with deflected hole to the sand. The first, killing of which created considerable interest at the time, was the Harrison & Abercrombie crater producer at Conroe. The relief well for the latter was drilled by Humble Oil & Refining Co. in cooperation with a group of other Conroe operators who acquired the well from its original owners. It also was drilled under the direction of engineers of H. John Eastman.

Hazards involved in the drilling of the Conroe relief well perhaps were somewhat greater due to the fact that the wild well with a crater a couple of hundred feet across was not on fire and the oil production, amounting at that time to around 6,000 bbls. daily, was being collected in open traps and reservoirs extending over an area of about 15 acres, ignition of which would have resulted in a tremendous conflagration. Special and elaborate preparation had to be made and extensive precautions taken to prevent a fire and to carry on operations should a fire result.

However, in view of the much shallower depth of the Seeligson well and the necessity for sharp and rapid deflection of the hole in the relief well, this project was possibly a little more difficult than the Conroe job. At Conroe the producing horizon is between 5,000 and 5,100 feet, and even after the relief well had been drilled vertically to below 1,400 feet, where surface casing was cemented, there remained 4,000 feet for the deflection of the hole a distance of approximately 450 feet. The Sinclair relief well at Seeligson was drilled vertically 400 feet where surface casing was cemented. This left less than 2,000 feet for deflecting the hole to the sand at a point near the crater well 386 feet away at the surface.

Angle of Deflection

The average angle of deflection in this well was 11° 30′ but at times the angle was as great as 16° 30′. In the last 1,000 feet down it is estimated the average angle was as much as 15°. A total of 16 whipstocks were used in the drilling. A point of unusual interest in connection with these acute angles of deflection is that casing was run into the hole without trouble of any kind.

Drilling of the relief well began late in November and surface casing was run and cemented in vertical hole around 400 feet. Surface plug was drilled out and deflection was started December 3. This hole was drilled with 9⅞-inch bit to 2,215 feet on December 23, and then was reamed to 14 inches, and 9⅝-inch casing was run and cemented on bottom. Cement was drilled out January 2 and by January 4 the hole had been drilled to its objective, and later the same day the pumping of water was started.

The crater well, 330 feet from the north and east lines of Section 71, R. P. Halderman Subdivision, S.K.&K. Survey No. 215, originally was drilled by Trinity Drillers, Inc., and completed last January in sand at 2,356-92 feet as a gas well making an estimated 50 bbls. of 22 gravity oil daily under pressure of 650 pounds. Bottom of the hole had been 4,032 feet but this was plugged back to test the above sands and 9⅝-inch casing was cemented on the sand at 2,356 feet. Following completion the well was acquired by Sinclair Praire Oil Co., which in October went back into the hole to deepen it. The old hole had been sidetracked and new hole was being drilled at 3,865 feet when the well blew out, presumably from the 2,300-foot sand in the old hole.

Sinclair Prairie Oil Co.'s No. 1-A Seeligson, Seeligson Field, Jim Wells County, relief well, which was drilled with deflected hole to kill the same company's No. 1 Seeligson, crater well (at right), which has been blowing and burning for two and a half months.

Out of Control

Out of control, the well was estimated to be making as much as 50,000,000 feet of gas daily with some oil. The hole soon started to crater, forming a crater about 50 feet deep and 50 feet across at the top. Various different attempts were made to kill it before the relief well was started.

The relief well was drilled with an 86-foot standard derrick, such as is customarily used in shallow drilling operations throughout that district. Other equipment, with the exception of the bits and whipstock, also was of the conventional type in the area. The only additional facilities provided were the metal shields placed on the sides of the derrick facing the burning well to protect the crews from the heat. Heavy mud has been pumped into the crater well to shut off the gas, but the hole is to be cemented, and as soon as this is done, the relief well will be straightened and drilled vertically to production.

James D. Hughes

W. G. James

First Impulse to Tear Off East Texas Lid Dampened by Overnight Reflection

FORT WORTH, Tex., Jan. 8.—Loading tank cars for interstate shipment from the East Texas Field started following announcement of the Supreme Court's decision holding invalid Section 9(c) of the National Recovery Act.

In anticipation of a possible decision adverse to the Federal Tender Board, many of the railroads operating in East Texas had been concentrating cars on sidings throughout the field.

Ernest O. Thompson, of the Railroad Commission, was en route to Washington possibly to seek support of the Texas congressional delegation for remedial measures.

The decision was regarded as putting the responsibility squarely on the Railroad Commission and the attorney general.

Overnight reflection and consultation had evidently changed the attitude, as this morning there was less talk of an immediate opening of the field until it is seen what the Railroad Commission and Congress may do.

Shipments Cut

Tank car shipments of refined products from East Texas Field, were cut from over 3,300 cars per day in the fore part of

(Continued on Page 32.)

Complete Text of Cole Committee Report on Petroleum Investigation

Chief Points in Committee Report

The Cole committee finds it is not advisable at this time to prepare temporary or permanent legislation on oil because "the decision of the Supreme Court on the Amazon and Panama cases should be very helpful to Congress in drafting legislation" and because of the effort of the governors' conference to effect an interstate compact, which the committee "strongly urges," declaring state compacts "an ideal solution." "Other plans outside of state lines are full of constitutional questions."

While there is "present excessive crude production to meet current demand there is no excessive supply to meet future demand." "We do not feel justified in the conclusion that the petroleum reserves available in the country today to meet future demand are excessive, but, on the contrary, we feel that they are of very limited nature. Statistics of production are also statistics of exhaustion."

"Any legislation establishing permanently the interest of the federal Government in the petroleum industry should provide for an agency, commission, or board to absorb some of the activities in various departments of the federal Government as now constituted. The Bureau of Mines might very easily be revamped for the purpose."

Such an agency should study supply and demand, reserves, and production methods, and pipe lines, and represent the federal Government, if need be, in any co-operative interstate compact.

The recommendations in full will be found on the following page.

WASHINGTON, D. C., Jan. 7.—The full text of the report of the Cole subcommittee of the House Interstate and Foreign Commerce Committee appointed to study the petroleum situation follows:

South Trimble, Clerk of the House of Representatives, Seventy-third Congress.

On June 15, 1934, the House of Representatives adopted House Resolution No. 441, as follows:

Resolved, that the committee on Interstate and Foreign Commerce, as a whole or by subcommittee, is authorized and directed to investigate (1) the production, importation, storage, transportation, refining, purchase, and sale of petroleum and its products for the purpose of determining whether there is an excessive supply of petroleum and its products; whether such excessive supply, if it exists, injuriously affects commerce in petroleum and its products and has the effect of rendering unprofitable the operation of wells of small but settled production and will cause their abandonment before the maximum economic yield is obtained; whether premature extraction of petroleum from natural resources, induced by absence of restrictions upon the quantity which may move in commerce, results in waste and inferior uses; whether restrictions should be placed upon the quantities of petroleum and its products which may move in commerce when an excessive supply exists, and, if so, whether such restrictions should regulate and co-ordinate commerce in petroleum and its products among the several states and with foreign nations, with fair and equitable apportionment among the states and among different operators and sources of supply; and whether commerce in petroleum and its products is of such nature that it may be regarded as a unit for the purpose of establishing quotas irrespective of whether transactions are interstate or intrastate, or whether exportations or importations is involved; and (2) all other questions in relation to the subject of regulating commerce in petroleum and its products.

Report on Investigations

The committee shall report to the House (or to the clerk of the House if the House is not in session) during the present Congress the results of its investigations, together with such recommendations for legislation as it deems advisable. For the purposes of this resolution the committee, or any subcommittee thereof, is authorized to sit and act during the present Congress at such times and places within the United States, whether or not the House is sitting, has recessed, or has adjourned, to hold such hearings, to require the attendance of such witnesses and the production of such books, papers, and documents, and to take such testimony, as it deems necessary. Subpoenas shall be issued under the signature of the chairman of the committee or any member designated by him, and shall be served by any person designated by such chairman or member. The chairman of the committee or any member thereof may administer oaths to witnesses.

The chairman of the Committee on Interstate and Foreign Commerce of the House appointed the undersigned subcommittee, to conduct the investigation authorized in the foregoing resolution. Pursuant to the authority vested in the subcommittee, a report of its deliberations, findings and recommendations is submitted herewith.

The subcommittee recognized that a thorough investigation of the petroleum industry should include not only consideration of the specific inquiries set forth in the foregoing resolution, but others definitely related thereto. Consequently, a study was made of the technical side of the problem, i.e., how the reserves of petroleum under the ground could be determined; where those resources were, and to what extent the quantity thereof could be accurately measured; the method of bringing this valuable natural resource to the surface; what happened to it thereafter; its movement through refining processes and all methods of transportation, ultimately reaching the great consuming public and making its contribution into practically every activity known to this age.

To give some idea of the many phases, technical and otherwise of petroleum and its products to which the subcommittee directed its attention, the following summary of the major subjects covered is given:

Probable Supply of Petroleum and Products

Geological Summary

1. Geological concepts, tracing history of knowledge regarding occurrence of petroleum, including movement of production centers from the east to the south and southwest.

2. Geological summary of Texas, Oklahoma and California, with description of major fields in each State.

3. Geological summary of other states, with description of stripper well and minor flush areas.

4. Estimates of reserves in present proven areas, starting with earliest estimates and continuing to the present, with estimates from group of geologists. Method of calculation and probable accuracy.

5. Probable extent of oil supply which may be developed in areas at present unproven, with estimates from geologists.

Technological Summary

1. How much oil is recovered and how has improved technology increased the recovery?

2. Changes in engineering views from the days when it was thought that oil flowed in underground rivers to the present concept of reservoir energy.

3. History of well spacing and the relationship between well spacing, energy utilization, and prevention of waste.

4. Methods of production and technical changes which have increased production, either through ability to drill deeper or recover larger proportions of oil.

Summary of Demand

1. History of demand, with changes in characteristics and fundamental reasons for change.

2. Previous forecasts of demand.

3. Forecast of gasoline demand until 1950.

4. Forecast of probable crude oil requirement to meet demand.

5. Forecast of probable changes in refining which will result. If for example gasoline demand by 1950 will double that of present, does this mean twice as much crude oil will be needed or will refineries in 1950 be able to produce twice as much motor fuel from crude as to the present plants? Hydrogenation and its economic status. Other substitutes.

6. Other demand factors, such as increasing efficiency of motors, habits of consumers, etc.

(Continued on Page 36)

The Cole Committee on its tour of investigation. Left to right: William P. Cole, Jr. (D) Maryland, chairman; Charles A. Wolverton, (R) New Jersey; Edward A. Kelly (D) Illinois; Samuel B. Pettengill, (D) Indiana and Carl E. Mapes, (R) Michigan.

Committee's Conclusions and Recommendations

The recommendations which concluded the report of the Cole subcommittee are as follows:

We have not deemed it advisable at this time to set forth in this report or to prepare for introduction when Congress convenes on January 3, a bill or bills embodying our conception of what permanent and/or temporary legislation should be enacted by the Seventy-fourth Congress dealing with the petroleum industry. There are numerous reasons for our taking this position. In the first place the National Industrial Recovery Act, though temporary, has through its provisions, and rules and regulations passed thereunder, helped the petroleum industry to some extent. At this time for instance the operation of the Federal Tender Board is given a great deal of credit for production being fairly in line with the demand established by the Federal Government. We anticipate that some of the pending temporary legislation will become permanent. Because of the constitutional difficulties which have arisen in the last 18 months in the administration of the petroleum code and other provisions of the National Industrial Recovery Act pertaining to petroleum, we feel that the decision by the Supreme Court of the United States in the Amazon and Panama cases should be very helpful to Congress in drafting legislation. The National Resources Board appointed by President Roosevelt early last summer to make a study of national, including natural resources, has just submitted an exhaustive report, Volume 1 thereof being the only one available to the subcommittee at this time. Volume 5 evidently will deal with our natural resources and it is important that the information and recommendations therein be known to Congress before definite legislation is considered.

To Wait on States

Another reason for not submitting legislation with this report is the pending effort of the governors of the oil-producing states to effect an interstate compact. We have made reference to the first meeting of the governors' conference on December 3, last. A meeting will be held simultaneously with the convening of the Seventy-fourth Congress. We strongly urge upon the oil-producing states the adoption of state compacts to deal with the problems of the production of petroleum with which individual states are powerless to cope. The subcommittee clearly recognizes the principle of state compacts for the purpose of effecting a common end of state interests. Other plans for dealing with the problems of petroleum production outside of state lines are full of constitutional questions. State compacts, flexible in operation and over which the President of the United States or a federal agency in the interest of the consuming masses of the nation, may hold some veto power, is an ideal solution of those problems of petroleum production, which cannot be solved by modification of the "law of capture" and other legislation operating within state boundaries. We are confident that the governors of the oil-producing states and the majority of the industry within those states, are cognizant of the common sense theory that waste of petroleum resources must be prevented. Huge waste, such as the subcommittee has witnessed in the Panhandle of West Texas should not be permitted to continue. Waste of many kinds in other fields, both past and present, shock any one possessing familiarity therewith.

At the meeting of the governors and governors-elect and representatives of governors, held on December 3, various important resolutions looking to the formation of an interstate compact were offered. It is the understanding of the subcommittee that these resolutions will be before the second meeting on January 3, 1935. This discussion and consideration by the governors of our oil-producing states coming at this time when the legislatures of all these states are either in session or about to convene, presents ample opportunity for the oil-producing states through actual agreement and approval to present to the Seventy-fourth Congress before its adjournment, a definite, specific compact for its consideration. It will not take many weeks after January 3 for the Congress, to decide whether the efforts of the governors of the oil-producing states promises worthwhile results. We believe they should be given the opportunity to take the initiative in drafting definite proposals without the Congress setting forth in a premissive way something in advance for the states to adopt. Something real and substantial may grow out of the pending effort. If it does not the Seventy-fourth Congress will have ample time to pass such legislation as may be deemed necessary.

Study of Supply

The determination of the necessity, extent and character of possible legislation, depends in part upon the question of whether an excessive supply of petroleum exists. There may be a difference of opinion as to whether "excessive supply of petroleum and its products means supply available to meet current demand, or reserves available to meet future demand."

An excessive supply of petroleum and its products to meet current demand undoubtedly exists. The potential production, based upon available potentials, is considerably in excess of today's production of crude oil. Large quantities of crude oil are above the ground in storage and imports of crude oil have been limited by definite restrictions. The total demand for crude oil, which includes domestic consumer demand and export requirements, is much less than the aggregate of potential production, stocks in storage and supplies available in foreign countries. There can be no doubt of the capability of the major oil fields to produce oil currently in excess of the rate at which the nation can consume petroleum and its products. This being true, an admittedly excessive supply will exist to meet current demand so long as proven reserves are capable of production in excess thereof.

Based upon conservative estimates of known reserves, an excessive supply of petroleum to meet future demand does not exist. Numerous estimates of the petroleum resources of the United States have been made during the past quarter century. Should future daily demand continue approximately in the amount required today, and no additional discoveries of new fields be made, the present known reserves would last—according to most estimates—approximately 15 years. This conclusion is reached upon the basis of present day production methods and ignores the possibility of future discoveries. We feel, however, that new pools will undoubtedly be found in many parts of the country and improved methods of bringing the oil to the surface, or even mining for the same—where too great a depth does not exist—will all result in a greater ultimate recovery. Oil shale, coal and other substitutes provide, at increased cost, vast quantities of petroleum products. The life of the present reserves to meet our future demands may be extended beyond the time estimated by improved mechanical devices for the use of petroleum products. We do not feel justified, however, even in view of the admitted possibility of improved methods of recovery being employed, and of additional discoveries of new pools, and of the use of substitutes and of possible improved mechanical devices, in arriving at the conclusion that the petroleum reserves available in the country today to meet future demand are excessive, but, on the contrary, we feel that they are of a very limited nature.

Statistics of Exhaustion

Statistics of production are also statistics of exhaustion. No one knows how much petroleum there is underground in America. We take the broad position that whether our petroleum supplies are large, or small, they should not be physically wasted above or below the ground. Cheap and abundant fuel and power are the very cornerstone of American industry, transportation and business. The people who predict abundant petroleum reserves 50, or 100 years from now, do not give bond for the accuracy of their estimates. We recommend not only to the national Congress, but to the state legislatures of the oil-producing states, as well as to public opinion itself, the strengthening of existing legislation toward the prevention of waste. The United States Government, with respect to petroleum on public and Indian lands, has not been without fault in this matter. As owners of public lands and guardians of Indian lands, the National Government has itself been a party to the rapid extraction of petroleum and the exhaustion of reservoir energy. We are impressed, despite much constructive legislation by many of the states, there is still room for more to be done.

The subcommittee has observed and had experience with the Petroleum Administrative Board as now constituted. While it is our belief that the Secretary of the Interior and the Petroleum Administrative Board have worked to accomplish worthwhile results, we do not believe that such an agency of the Federal Government, dealing with the important problem before it, should be continued as a permanent agency in its present form.

The petroleum industry, the third largest in the country, represents an investment, based upon present day values, of more than $12,000,000,000. No argument is needed to establish reasons for the interest of the national Government in the future development and in the operations of many of the present day activities in the petroleum industry.

Federal Assistance

We recommend, therefore, that any legislation establishing permanently the interest of the Federal Government in the petroleum industry should provide for an agency, commission, or board, as it might be designated, to absorb some of the activities in various departments of the Federal Government as now constituted. The Bureau of Mines might very easily be revamped for the purpose.

The subcommittee feels that such an agency should have sufficient personnel and authority to study continuously the status of the petroleum reserves; encourage discoveries of new pools; assist in improving present day methods of production; study the possibility and expense of repressuring in various existing fields; systematically determine the total demand for petroleum and its products, both domestic and foreign, have jurisdiction over the management of oil-producing public and Indian lands; be given jurisdiction to establish pipe line rates, unless the Interstate Commerce Commission is given greater appropriation to handle more expeditiously this subject now before it; and to study and make report as to the advisability of divorcing pipe lines; recommend at regular intervals to the President of the United States—the President being given authority by Congress to approve—limitations upon the importation of petroleum and its products, including natural asphalt, so as to prevent importation thereof from interfering with current domestic production by supplying an undue proportion of the domestic consumption and export demand therefor; to represent the Federal Government, if need be, in any co-operative interstate compact, agreed upon and approved by the Congress and in general, to possess all other necessary authority so as to present that dignity, from a national standpoint, to which the subcommittee believes the petroleum industry is entitled.

Coal, timber and other natural resources, might properly also be included under the jurisdiction of this agency.

We are convinced that not sufficient attention is being paid to the interest of consumers of petroleum products. Settlement of so-called price wars, which result in some cases in an increase of nearly 100 per cent to the cost of gasoline, strain the credulity of the observer on the theory that they just happened without prearrangement. In view of the fact that the "Sherman antitrust act" is still the law of the land, except in so far as temporarily it may be suspended by the operation of the National Industrial Recovery Act, we think that the fixing of gasoline prices is a matter worthy of close and constant scrutiny by the Department of Justice.

It is the purpose of the members of this subcommittee, all of whom have been re-elected to the Seventy-fourth Congress, to ask the permission of the Seventy-fourth Congress to file a supplemental report when the decision of the Supreme Court in the Panama and Amazon cases shall have been rendered, the result of the governors' conference now in session with respect to an interstate compact, shall have been concluded and the full report of the National Resources Board shall have been published.

Many Factors Operating to Aid Natural Gasoline Market in 1935

By W. T. ZIEGENHAIN

The year 1935 promises to be more profitable for natural gasoline manufacturers. This feeling is expressed by the petroleum industry generally but there are certain factors which seem to place natural gasoline in a preferred position at this particular time.

Operating as one of the smaller major divisions within the oil industry and closely allied with oil production activities it has been forced to expand and forced to curtail at times which were not always best suited to its own welfare. Over the past these changes came about principally in the interests of conservation. So, with the production department forcing the building of plants whenever new pools of oil happened to be located and the refining division acting as the sole important customer to absorb the output of these plants, there is little wonder that the past three or four years of general economic adjustment has placed the industry at a decided disadvantage at times.

Production Limitations

It appears now, however, that these dependencies will operate to the advantage of the natural gasoline division during 1935. There is little doubt but that any expansion of drilling will be accompanied by a sane program of field development and that this in turn will discourage the resumption of the old practice of building gasoline plants of sufficient capacity to take care of the temporary flush production of gas.

The prorating of crude production thus not only limits the quantity of cheap crude thrown onto the market to replace natural gasolines, but limits the quantity of gas processed through gasoline plants. So, the fear of new production for 1935, even if new fields are found, is less than at any previous time.

There may be some increase in the output of the East Texas area as additional wells are hooked up and as vacuum is used to a greater extent but students of conditions in that field do not expect the present production of 5,000,000 gallons a month to be increased to more than 8,000,000 gallons at the peak of the field's production. This volume is small compared to the total U. S. production of 130,000,000 gallons monthly at present.

There may also be some increase in production along the Gulf Coast, particularly if an expansion of "stripper" plants is permitted, but this is not expected to reach the proportions of activities of stripper plants in the Panhandle of Texas. Furthermore, operators of these Panhandle stripper plants indicate every willingness that production there be limited through some equitable plan of curtailing gas production and through the ratable taking of gas by the major pipe lines so that nothing appears to stand in the way for the state to modify the sour gas law in such a manner as will stop the present waste of gas and at the same time satisfy the large number of Panhandle land owners and gas producers. In anticipating results here the proper weighing of political forces is as important in projecting plans for 1935 as a study of what wastes might have accrued over the past. But by limiting vision to 1935 alone, certainly at this time there is little to suggest any great expansion of stripper activities in the area and any change is likely to be in the opposite direction and will be of direct benefit to the natural gasoline market. The effect of curtailing production there might easily overcome any increase in stripper operations on the Gulf Coast.

Older Fields

Throughout the older fields of California, the Mid-Continent and those in the Rocky Mountain and Appalachian areas, a natural decline in production has been in progress for a long time and the only compensating factor that has been asserting itself is the larger but well controlled output of natural gasoline in the Kettleman Hills Field of California. Approximately 14,000,000 gallons are coming from this field monthly at present or about one-third of the entire production in California. The importance of the Kettleman Hills area is second only to the Panhandle where an output of approximately 23,000,000 gallons is being realized monthly. California and Texas are the two most important sources of supply, accounting for about two-thirds of the entire output of the nation so a study of problems in these two states alone will permit a reasonably accurate guess in regard to the immediate future of natural gasoline from the standpoint of production, and nothing has been revealed to indicate any substantial shifting of operations from the present in these states other than mentioned.

Oklahoma is the next most important area supplying natural but conditions there indicate that the prolific Oklahoma City Field has reached its maximum gasoline production and the new areas, including Fitts, South Burbank and Edmond, although promising as producers do not appear as threats to the market.

With the production of natural gasoline likely to be held down to something near its present level during 1935, it is only necessary to view the factors which affect its use to justify the more optimistic attitude now assumed by the industry's representatives.

Market Influences

The demand for natural gasoline during 1935 will of course be influenced by the delivered cost of the commodity and refiners have been able to figure very sharply just where to curtail their needs. This fact alone stands in the way of expecting premiums to be paid for natural gasoline over any long period.

Due to this, manufacturers and marketers are now attempting to write contracts that might reflect the relationship that should exist between refinery gasoline prices and natural prices over the year. Those students of the market who are known to follow conservative lines state that 26-70 natural may be expected to sell 1 cent below low octane refinery gasoline in the Mid-Continent as an average over the year. Their chief concern seems to be to avoid wide price differentials during next April and May, a period of the year which usually proves to be most unprofitable to manufacturers.

Another opinion was to the effect that it would not be difficult to hold spot prices within three-quarters cent of low octane refinery gasoline throughout the first nine months of 1935 and that in the last quarter the industry should expect a small premium.

Equipped to Store

The industry is now equipped to store a larger quantity of natural gasoline in pressure tankage than ever before and in turn is better able to smooth out the annual April dip in prices. The amount of storage room is still too small to expect this factor alone to maintain prices in the spring, but is mentioned here as a contributing factor.

A more important one at the present writing appears to be the mounting demand for motor fuels generally. If general economic recovery continues and the consumption of motor fuel increases 5 to 8 per cent compared with 1934, there will be a 5 to 8 per cent increase in the need for natural gasoline.

Gasolines More Volatile

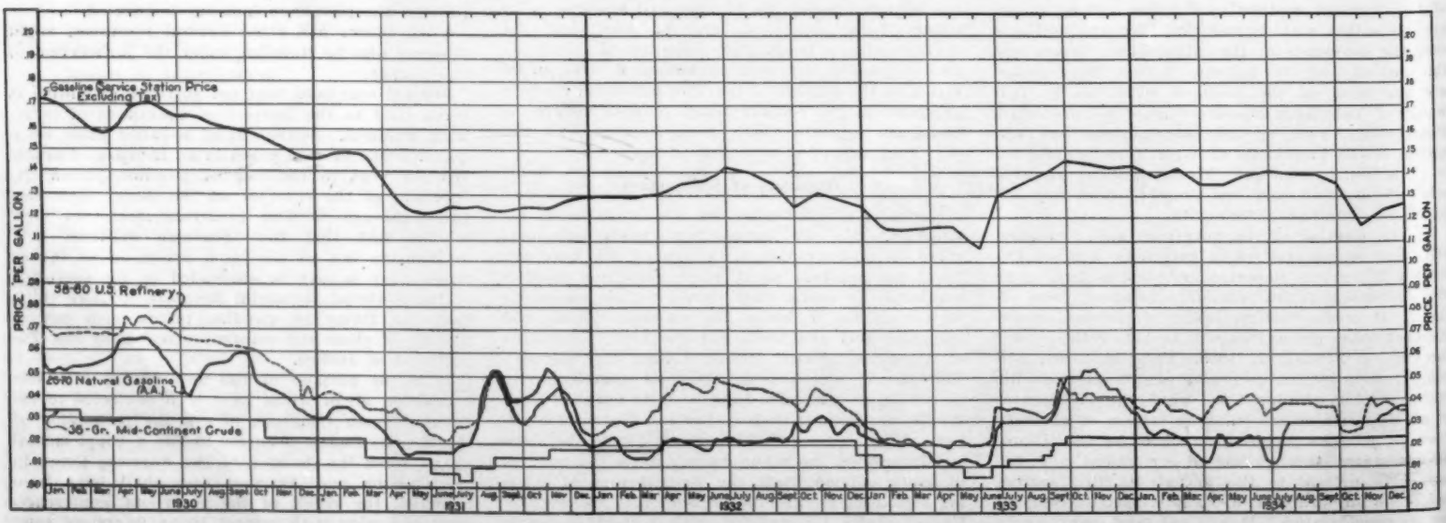
In addition to the fact that more motor fuel is expected to be sold next year, there is strong indications that the motor fuel will have a higher average volatility. Suggestion of this came in rather definite form two weeks ago when the Standard Oil Co. of New Jersey and the Gulf Refining Co. announced they would offer the equivalent of aviation gasoline as their premium fuel. The Phillips Petroleum Co. announced a 100 per cent natural gasoline product as its premium fuel for certain areas in the northern states just a short time before.

In addition, there has been a decided trend toward increasing volatility in the regular or house brand fuels. One executive pointed to this factor alone as reason for his favorable showing in sales for the past two months.

Coupled with this tendency to increase the quantity of natural in the regular or house brand of refinery gasoline is the tendency to sell more of that grade at the expense of third grade material. At many points in the East, third grade gasoline has been abandoned. This movement is likely to spread to other sections. Just as soon as cheap straightrun East

(Continued on Page 28.)

Trend of Natural Gasoline Prices Compared With Crude and Refinery Gasoline



The trend in filling station prices reflects the average of the prices paid for the regular grade of gasoline in 50 scattered cities in the United States. The refinery gasoline price trend reflects the Oklahoma tank car quotation on low octane material. The trend of crude prices is based upon the postings of major buyers for 36 gravity Mid-Continent oil. The improvement in the relative position of 26-70 Mid-Continent gasoline since the middle of 1934 is clearly shown here.

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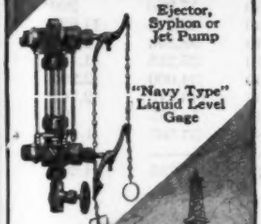

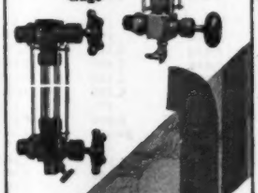

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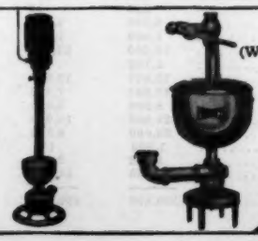

Mid-Continent Crude Runs for January to Continue Downward

By GEORGE WEBER

With an estimated total of 426,070 bbls. per day, crude runs to refineries in the Mid-Continent will again decline for the month of January. The monthly total estimate is 22,290 bbls. or 5 per cent less than the estimate of a year ago, and represents a decline of 3.3 per cent from December operations. The greater part of the 14,655-bbl. decrease from December is due to the continued curtailment in the East Texas refineries. Figures for the remainder of the Mid-Continent reveal little change in monthly programs. Arkansas, Kansas and North Central Texas report total additions to operating schedules. The other districts will further cut runs from the December mark.

The continued shutting down of East Texas refineries is still strong, with the end of the decline not yet in sight. Of the 91 plants in the district, approximately 64 are shut down and more are expected to follow suit before the end of January. The estimated total of crude now run in the field is about one-quarter of that processed during November. From second place in refining activities in the Mid-Continent, East Texas has dropped to fifth or sixth. It now ranks with North Louisiana in amount of crude run.

An indication that the shutdown in the field is more than temporary is the increasing report of abandonment of the refineries. The plants of the Calcul Refining Co. of Gladewater, and the O. K. Topping Plant and Star Refining Co. of Kilgore have been dismantled, and many more may follow during the month. All plants in the field are connected to not over 22,000 bbls. of legal oil per day. Runs for the latter part of December were down to 24,000 bbls. per day, or about the legal amount. Thus East Texas at present is operating on a normal legal program of refining according to allowable figures. With the shifting of control from the federal agencies to the state commissions as brought about by the decision on the Panama and Amazon cases, a different set of conditions may appear in Texas. The Railroad Commission, together with the new administration is expected by many to take a more liberal attitude in the matter of allocation and control in the field. This change would possibly start the activity in East Texas again on the upswing.

No shutdowns are expected in Oklahoma for January. Operations at the Wynnewood refinery of the Texas Pacific Coal & Oil Co. have been permanently abandoned. The plant, adapted to the manufacture of asphalt products, has been shut down since October and will be sold or dismantled by the owners. The Continental Oil Co. will decrease schedules 4,000 bbls. per day, while the Empire Oil & Refining Co., the Marathon Oil Co., the Pure Oil Co. and the Sinclair Refining Co. will increase crude runs.

Mid-Continent Refinery Operations

Average Daily Crude Runs (Barrels)
(Based on estimates compiled first of each month by The Oil and Gas Journal)

	1930	1931	1932	1933	1934	1935
January	535,460	478,795	405,910	399,405	448,360	426,070
February	519,355	470,125	411,280	407,125	456,619	.....
March	531,500	449,634	401,155	423,445	465,680	.....
April	555,250	497,391	419,391	441,000	458,220	.....
May	574,300	510,540	436,160	470,460	457,165	.....
June	572,250	567,915	440,765	479,987	459,908	.....
July	548,475	588,840	433,255	525,845	477,012	.....
August	526,400	590,545	427,710	518,510	501,750	.....
September	498,710	588,105	430,430	526,749	499,830	.....
October	518,800	472,190	401,995	495,756	500,755	.....
November	506,700	480,440	408,180	481,335	500,445	.....
December	478,360	456,525	416,275	434,275	440,735	.....

Operations by Refinery Districts

	Jan. dly. crude capacity	Jan. dly. crude runs	Dec. dly. crude runs	Jan. dly. decrease
Arkansas	38,550	18,150	17,950	200*
East Texas	228,800	31,890	43,515	11,625
Kansas	180,950	100,640	98,840	1,800*
North Central Texas	107,780	36,710	35,215	1,495*
North Louisiana	55,450	31,800	34,000	2,200
Oklahoma	286,000	140,555	143,315	2,760
Southwest Texas	26,800	14,245	14,335	90
West Texas and Panhandle	125,570	52,080	53,565	1,485
Total	1,049,900	426,070	440,735	14,665

*Increase.

In North Central Texas, increased schedules by the Gulf Refining Co. and the Texas Pacific Coal & Oil Co., together with smaller companies will bring the total crude runs to a slightly higher figure than the December runs. The increased activity in the Texas Pacific refineries follows the shutdown of its Oklahoma refinery. The Empire Oil & Refining Co.'s plant at Gainsville has processed the last of the crude there in storage and is completely shut down. The Taxman Refining Co. also reports the closing of its plant at Wichita Falls.

The tax of 1 cent per barrel on refining in Louisiana will have some effect on the operations of refineries in Louisiana, but the extent of curtailment cannot be predicted. The change in north Louisiana will be slight, however, as most of the crude processed in this area is from Louisiana fields and the 1 cent tax is not prohibitive to present refining activities there.

WEST TEXAS AND PANHANDLE

Company and location—	Daily capacity	Aver. daily runs January	Aver. daily runs December
Active Oil Co., Arno	1,500	(*)	(*)
Aero Refining Co., Pecos	220	200	200
Coltex Refining Co., Colorado	12,500	3,500	5,335
Concho Refining Co., San Angelo	250	120	120
Cosden Oil Co., Big Spring	12,500	6,500	6,000
Dancizer Refineries, Inc., Pampa	6,500	5,500	5,500
Howard County Refining Co., Big Spring	1,500	150	150
Mertzon Refining Co., Mertzon	100	20	20
McNutt Refining Co., El Paso	2,000	600	600
Panhandle Refining Co., Kings Mill	2,000	1,400	1,400
Paramount Refining Co., San Angelo	2,000	(*)	(*)
Pasotex Refining Co., El Paso	14,000	5,500	5,500
Phillips Petroleum Co., Borger	50,000	21,290	21,290
Shamrock Oil & Gas Co., Sunray	2,000	1,400	1,400
Shamrock Oil & Gas Co., Meldavis	1,500	1,100	1,100
Sinclair Refining Co., El Paso	2,500	600	600
Texas Co., El Paso	2,000	700	700
Texas Co., Amarillo	4,000	3,000	3,000
West Texas Refining Co., Pecos City	6,000	(*)	(*)
Wickett Petroleum Co., Wickett	2,500	400	400
Total	125,570	52,080	53,565

*Shut down.

KANSAS

Company and location—	Daily capacity	Aver. daily runs January	Aver. daily runs December
Barnsdall Refineries, Inc., Wichita	4,000	2,000	2,000
Derby Oil Co., Wichita	8,000	4,000	4,500
Dickey Refining Co., McPherson	5,000	1,000	1,000
Eldorado Refining Co., Eldorado	5,000	2,500	2,800
Falcon Refining Co., Inc., Great Bend	700	500	500
Globe Oil & Refining Co., McPherson	10,000	7,500	7,500
Golden Rule Refining Co., Wichita	1,500	(*)	(*)
Kanotex Refining Co., Arkansas City	12,000	4,500	4,000
Kansas Gas & Gasoline Co., Winfield	500	100	100
Kreuger Refining Co., Laton	150	50	50
National Refining Co., Coffeyville	6,500	4,000	4,000
Petroleum Products Co., Chanute	1,000	1,000	1,000
Phillips Petroleum Co., Kansas City	18,000	11,290	11,290
Security Petroleum Co., Chase	3,100	(*)	(*)
Shell Petroleum Corp., Arkansas City	20,000	12,000	12,000
Sinclair Refining Co., Coffeyville	12,000	7,500	6,000
Sinclair Refining Co., Argentine	9,500	6,000	5,400
Skelly Oil Co., Eldorado	23,000	16,000	16,000
Standard Oil Co. (Indiana), Neodesha	20,000	4,500	4,500
United Oil & Refining Co., Hutchinson	1,500	(*)	(*)
Vickers Petroleum Co., Potwin	3,500	2,200	2,200
Socony-Vacuum Oil Co., Inc., Augusta	16,000	14,000	14,000
Total	180,950	105,640	93,840

*Shut down.

OKLAHOMA

Company and location—	Daily capacity	Aver. daily runs January	Aver. daily runs December
Anderson-Prichard Oil Corp., Cyril	6,000	3,500	3,840
Altitude Petroleum Corp. (J. H. Peacock Refining Co.) Oklahoma City	3,000	(*)	(*)
Associated Petroleum Corp., Allen	8,000	(*)	(*)
Barnsdall Refineries, Inc., Barnsdall	6,000	3,500	3,500
Barnsdall Refineries, Inc., Okmulgee	10,000	2,800	2,700
Bell Oil & Gas Co., Grandfield	4,500	2,100	2,100
Black Gold Refining Co., Oklahoma City	2,500	1,500	1,000
Century Petroleum Corp., Oklahoma City	2,500	(*)	(*)
Champlin Refining Co., Enid	16,000	6,000	6,000
Continental Oil Co., Ponca City	30,000	20,000	24,000
Crescent Refining Co., Holdenville	1,000	(*)	(*)
Cushing Refining & Gasoline Co., Blackwell	1,700	1,500	1,500
Cushing Refining & Gasoline Co., Cushing	4,500	2,500	2,000
Deep Rock Oil Corp., Cushing	10,000	9,000	8,000
Eason Oil Co., Enid	5,000	2,500	2,500
Empire Oil & Refining Co., Okmulgee	4,000	2,100	1,800
Empire Oil & Refining Co., Ponca City	12,000	6,450	6,120
Globe Oil & Refining Co., Blackwell	7,500	6,000	6,000
Government Refining Co., No. 1, Oklahoma City	1,000	(*)	(*)
Government Refining Co., No. 2, Oklahoma City	3,500	(*)	(*)
Government Refining Co., No. 3, Seminole	800	(*)	(*)
Hanger Refining Co., Oklahoma City	1,000	120	120
Johnson Oil Refining Co., Cleveland	6,000	4,500	4,500
Major Petroleum Products Co., Oklahoma City	2,000	450	450
Marathon Oil Co., Bristow	5,000	2,550	2,000
Mid-Continent Petroleum Corp., West Tulsa	40,000	18,000	18,000
Monarch Refining Co., Oklahoma City	1,000	(*)	(*)
Paramount Refining Co., Oklahoma City	2,000	900	800
Peppers Gasoline Co., Oklahoma City	500	150	200
Phillips Petroleum Co., Okmulgee	6,000	4,840	4,840
Pure Oil Co., Muskogee	9,000	6,700	6,500
Rock Island Refining Co., Beckett	6,000	3,200	3,200
Sinclair Refining Co., Sand Springs	3,000	2,700	2,600
Sinclair Refining Co., West Tulsa	6,000	(*)	(*)
Sun Oil Co., Yale	5,000	2,000	2,000
Sunray Oil Co. (C. E. Wright, receiver), Allen	7,000	2,000	2,000
Texas Co., West Tulsa	15,000	12,000	12,000
Tide Water Oil Co., Drumright	15,000	7,000	7,000
Triangle Producing & Refining Co., Oklahoma City	1,000	700	700
Wilcox Oil & Gas Co., Bristow	5,000	2,000	2,000
Wirt Franklin Petroleum Corp., Ardmore	4,000	1,265	1,335
Yale Oil Corp., Yale	2,000	(*)	(*)
Total	286,000	140,555	143,315

*Shut down.

NORTH LOUISIANA

Company and location—	Daily capacity	Aver. daily runs January	Aver. daily runs December
Acme Refining Corp., Monroe	100	50	50
Bayou State Refining Co., Hosston	750	100	300
Griswold Refining Co., Shreveport	1,000	700	700
Louisiana Oil Refining Co., Shreveport, Bossier	30,000	18,000	20,000
Pelican Refining Co., Converse	100	50	50
Shoreline Oil Co., Lewis	1,000	900	900
Spartan Refining Co., Shreveport	12,000	10,000	10,000
Stanolind Oil & Gas Co., Vivian	3,500	2,000	2,000
Texas Co., Shreveport	7,000	(*)	(*)
Total	55,450	31,800	34,000

*Shut down.

(Continued on Page 28)

"A new gasoline—a sales builder—a money-maker for you...made possible by installation of the latest cracking and reforming units." CUSHING REFINING & GASOLINE CO. *announcement in* NATIONAL PETROLEUM NEWS

Right

Those "latest cracking and reforming units" are Dubbs units

Dubbscracked gasoline is always "a sales builder, a money maker"—for you as well as for Cushing and its customers

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Universal Oil Products Co
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THE OIL AND GAS JOURNAL

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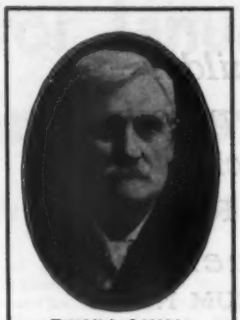

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No More Blank Checks

The days of "getting away with murder" at Washington are over. The Constitution is not a dead letter. There are limits to the assumption of authority.

Primarily that is the import of the decision by the Supreme Court on the existing situation. It sets usurpation in its place and reminds Congress there is a right way to do things which must be followed.

Ours is a government of disjunctive powers, legislative, executive and judicial. Each is restricted to its proper sphere. Congress cannot assume executive power and cannot delegate legislative power to an executive.

This was the point upon which the court ruled. Section 9(c), the Connally amendment to the National Recovery Act, broadly authorized the President "to prohibit the transportation in interstate and foreign commerce of petroleum and its products produced or withdrawn from storage in excess of the amount permitted to be produced or withdrawn by any state law or valid regulation or order prescribed thereunder, by any board, commission, officer, or other duly authorized agency of a state."

Section 9(a) authorized the President "to institute proceedings to prescribe regulations" on pipe lines and so did section 9(b), but Section 9(c) said nothing about instituting proceedings or ascertaining facts, simply that "the President is authorized to prohibit."

There is nothing in the act, the court says, either in its title or in Section 9(c), providing for control of production of petroleum within a state, nor any effort to lay down rules for the guidance of state legislatures or state officers.

"It establishes no criterion to govern the President's course. It does not require any finding by the President as a condition of his action. It gives him unlimited authority to determine the policy and lay down the prohibition, or not lay it down, as he may see fit. And disobedience to his order is made a crime punishable by fine and imprisonment."

Put down thus coldly and starkly could a court sworn to uphold the Constitution have ruled otherwise? "The best of motives is not a substitute for constitutional authority." With such a precedent established what defense remained against executive tyranny if a tyrant arose?

The waste of oil through excess production is a recognized evil but such a precedent as proposed by Section 9(c) might some day be applied to oil without reference to excess production or to any commodity.

There is another way—the constitutional way—of dealing with this situation. Congress should lay down the policy which it authorizes the Executive to exercise instead of jauntily handing him a blank check.

That is the clear implication in the decision. It is not, so far as can be seen, an opinion on the constitutionality of prohibiting the movement of illegally produced oil in interstate commerce. But it does imply that before there can be prohibition there must be constitutional authority for it through proper legislation.

The court specifically states that it expresses no opinion as to the interpretation or validity of the provisions of the petroleum code. The fundamental question is the validity of Section 9(c) of the recovery act.

Further along the court says: "Assuming for the present purpose, without deciding, that the Congress has power to interdict the transportation of that excess in interstate and foreign commerce, the question whether that transportation shall be prohibited by law is obviously one of legislative policy."

The failure of Congress to enact such a specific law and the attempt to delegate that legislative power to the President is responsible for the action of the court.

"It is no answer to insist that deleterious consequences follow the transportation of 'hot' oil, oil exceeding state allowances," the court says, because "Congress did not prohibit that transportation. It did not undertake to say that the transportation of 'hot' oil was injurious or that the transportation of that oil was 'unfair competition'." It left everything to the President which constitutionally it could not do.

It is interesting to note that Governor Allred of Texas, while recognizing that the state's power to deal with oil is unaffected by the decision, predicts that Congress will re-enact a specific prohibition against interstate movement of oil in excess of state allowables.

Administrator Ickes also expects that whatever federal legislation is required to conform to the opinion of the court will be prepared.

If that interpretation be correct Congress will probably be pressed to pass such legislation.

Meantime, there should be no jumping to the conclusion that all regulation has failed and we are on the verge of wide open production.

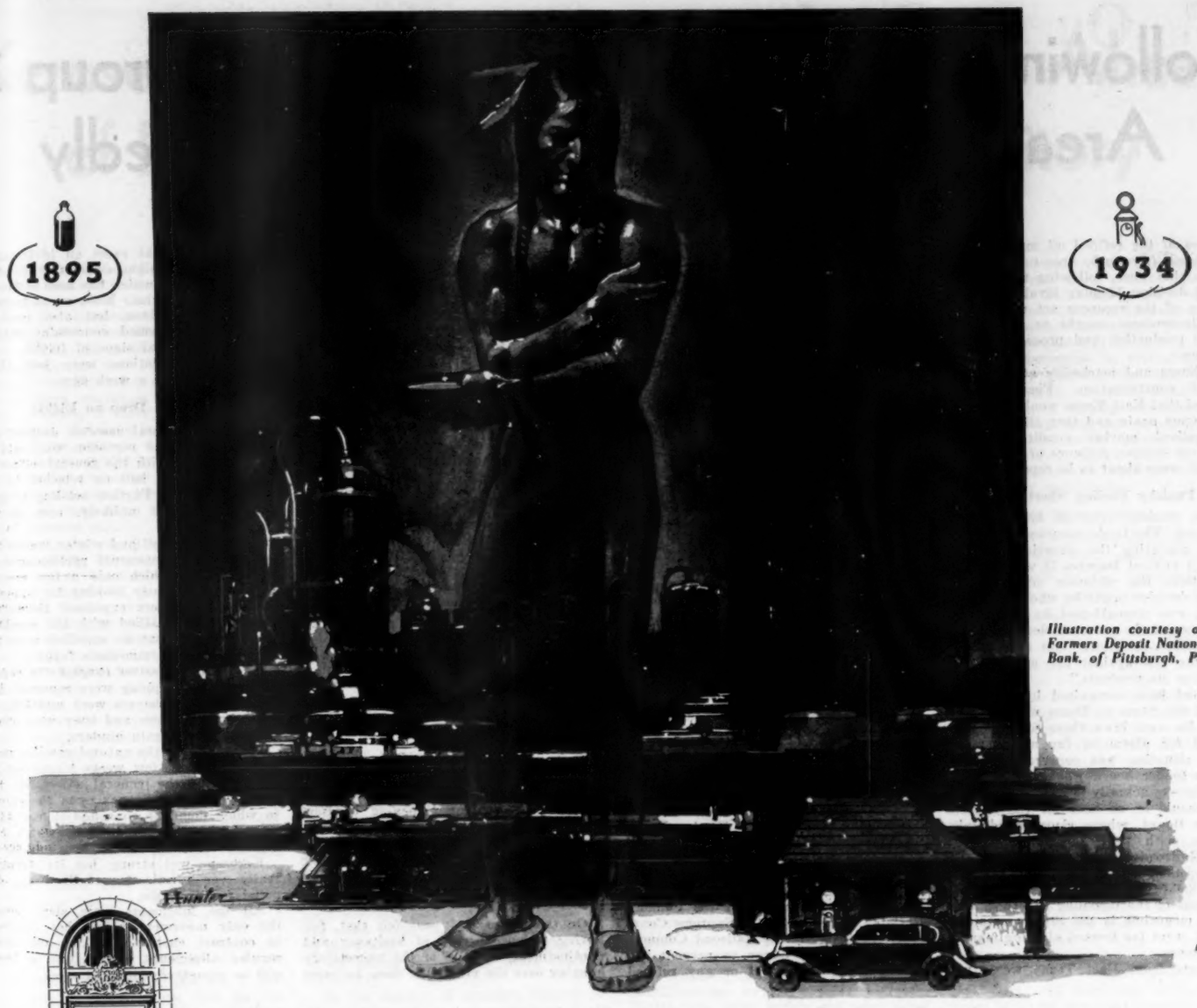
The States of California, Oklahoma and Kansas are showing ability to keep production within bounds. Texas, with its new tender board law, should be equally effective unless it wishes to throw away its natural resources.

Whether or not there is action by Congress, the oil producing states acting in concert to keep their respective production within the limits of demand, can, if they will, make restriction on interstate movement unnecessary.

This, of course, would be the preferable method. Federal assistance was sought only when state action seemed impossible. But there is a better realization within the states of the need for regulation in their own interest as well as that of the industry and the country and this decision may hasten agreement.

In any event there is no occasion to expect a collapse of regulation and a new flood of wide open oil. Those who may be counting upon such a result will probably have reason to regret acting upon it, if they do.

The statement by F. W. Fischer, counsel for the companies involved in the suit, that "no one need have any fear that the country will be flooded with excess oil for the reason that the Texas commission now has ample power to prevent movement to an interstate carrier" should give pause to hasty heads in East Texas. A decision upholding the Constitution is not going to plunge the oil industry back into anarchy.



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Pittsburgh! Synonymous with steel. Detroit —and automobiles. Akron—and rubber. TULSA—and OIL!

The first commercial oil well in Oklahoma—out of which grew the whole industry in the Southwest—was drilled within five miles of the city of Tulsa just 33 years ago

Now, more than 500 producing, refining, marketing and pipeline companies—40 of world-wide significance—maintain headquarters in Tulsa. Why this concentration in what might have been a forgotten prairie town? Because 71.47% of the oil production of the United States, which is 40% of the world's production, is produced in an area of which Tulsa is the logical operating and distributing center.

Purchases of oil equipment made through Tulsa offices to supply this great area total $400,000,000 yearly. *Oil quotations throughout the world are determined by Group 3 prices, established in Tulsa.*

Small wonder that oil financing is one of the principal functions of Tulsa's oldest bank, established six years prior to the discovery of the first small pool. Through the intervening years, The First National Bank and Trust Company of Tulsa has served the industry in all its branches.

Oil and associated companies throughout the world will find this institution helpful in making contacts in the Oil Capital. Correspondence is invited.

THE FIRST NATIONAL BANK and TRUST COMPANY OF TULSA

Following Brief Nervousness Market in Group 3 Area Takes Court's Decision Composedly

By T. F. SMILEY

Eyes of the refined oil market in the Oklahoma (Group 3) area turned toward Texas this week, following the Supreme Court decision Monday invalidating that section of the recovery act under which the Government sought to prevent the illegal production and processing of petroleum.

Refiners and marketers at first manifested consternation. Fear was expressed that East Texas would be thrown wide open again and that all the former demoralized market conditions which grew out of open defiance of law in that district were about to be repeated.

Panicky Feeling Short-Lived

This panicky state of mind did not last long. The trade composed itself and while admitting the situation was not without critical features it was disposed to believe the ultimate effect of the court's decision might be wholesome. This feeling was strengthened by the prompt assurance of the governor-elect, James V. Allred, that the State "can and will enforce its law against the movement of hot oil or its products."

It had been recognized by the trade that if the State of Texas would rigidly apply its own laws there would be no ground for alarm so far as the East Texas situation was concerned. If the State's tender board would function efficiently—as actually it has been doing—there would be no need for the Federal Tender Board, whose rigorous administration, with the co-operation of the State Railroad Commission, has virtually dried up the flood of hot oil and its products. So the vigorous and unqualified statement of the incoming governor, who in the meantime is the State's attorney general, went far toward allaying market nervousness.

Reports from East Texas were that as soon as news of the decision was received there loading of tank cars with gasoline for interstate shipment began on the assumption that since the necessity of federal tenders had been removed the way was clear to move products into other states without restriction as in the days before the Federal Tender Board was set up. Expectation of easy disposal of this material received a dent, however, not only in the pronouncement of Mr. Allred, but in a reminder by Attorney F. W. Fischer, counsel for the Panama Refining Co. in one of the Supreme Court cases, that the Texas Railroad Commission had "ample power to prevent the movement of illegal oil or any refined product from the place of its origin to an interstate carrier."

Little Basis for Fear

Market observers inclined to the view there was little basis for fear that there would be a general reopening of East Texas refineries shut down as a result of strict tender regulations or that there would be any immediate release of some 150,000 bbls. of gasoline in that area alleged to have been made from illegal crude.

On the contrary, it was felt that, following a brief period of hesitancy and readjustment, removal of the uncertainty hanging over the market in these supreme court cases might exert an invigorating influence and might even start some of the new buying which has been distinctly lacking for months. None cared to make positive predictions, but also none of those best informed concerning market conditions showed signs of fright.

Gasoline quotations were just about where they were a week ago.

Naturals Drop an Eighth

Although natural gasoline dropped another eighth, the recession was said to be in keeping with the general course of the market and had no relation to the court decision. Further settling of quotations was not unlikely, men in the trade said.

The present fall and winter season has witnessed a phenomenal performance by the naturals, which only a few months ago were anxiously looking for support, and manufacturers expressed themselves as not only gratified with the excellent business done, but as satisfied with the outlook for the immediate future.

A few inquiries on cargoes for export or coastwise shipping were reported, but the prospective buyers were unwilling to pay current prices and they were characterized as bargain hunters.

The course of the natural gasoline market in the next few weeks hinges not so much upon the general effect of the week's court decision as upon the extent to which domestic consumption can take care of current production, which has begun to back up a little here and there.

Kerosene was strong, but its strength really was a reflection of the heavy demand for distillate.

All the lubricants were slow, about the only movement being that involved in contract customers taking out their regular allotments. Wax was a little soft as compared with last week.

Refined Oil Market Barometer

Although concern was evidenced in all areas regarding the effect of the Supreme Court decision on the market, there was a growing inclination to feel that no serious damage had been done. Adding to this feeling was news that the retail gasoline price situation had been improved in the East and Middle West, with price wars being wiped out. The opinion generally expressed was that if the state administration in Texas applied its laws vigorously there was no reason to fear return of the wide-open conditions of last summer and the market situation would be benefited, rather than impaired, by the court's action.

Mid-Continent—Weak undertone in gasoline. Naturals working downward. Kerosene scarce. Distillate firm. Lubricants soft.

East Coast—Retail gasoline situation improved, price wars eradicated. Prices generally unchanged and spot trading inactive.

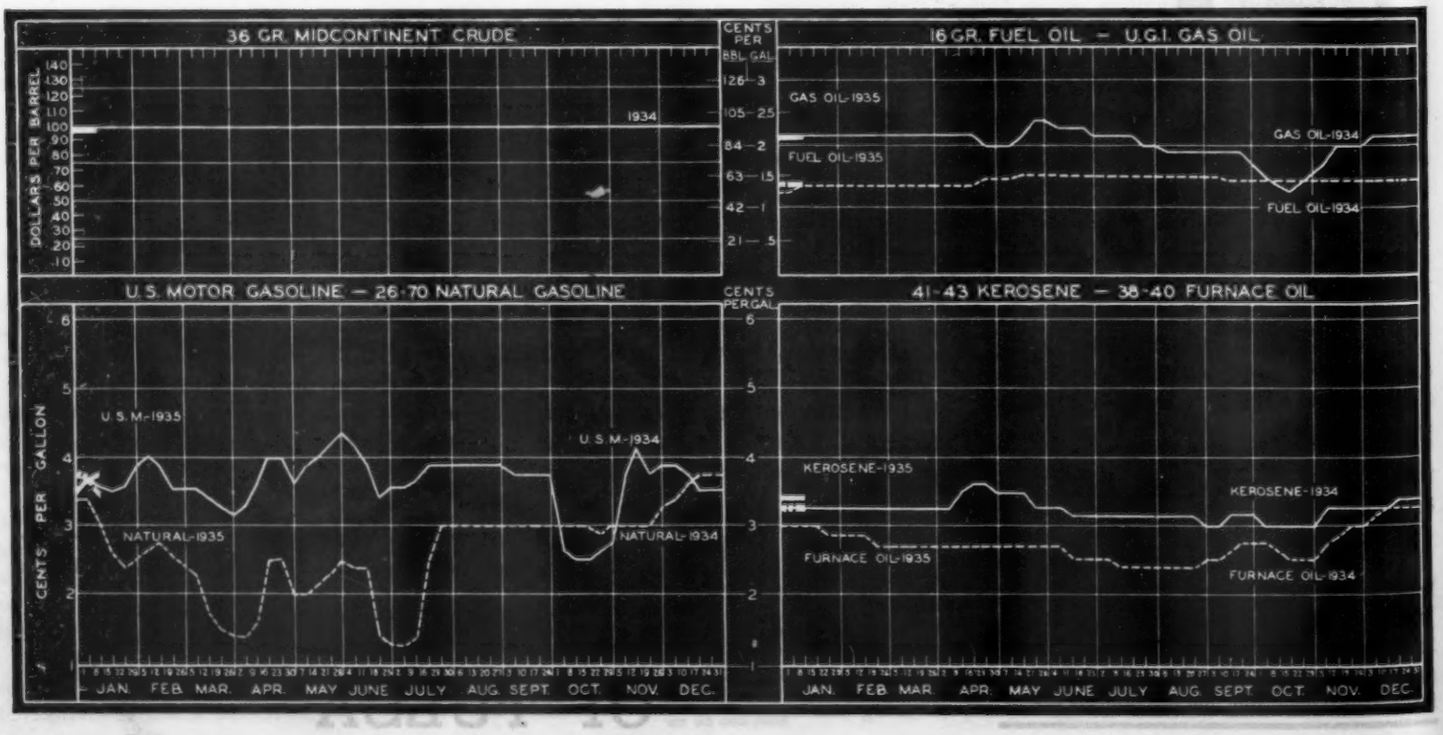
Gulf Coast—Prices unchanged, but inquiries for all products increased. Kerosene, fuel oil and gas oil firm, lubricants better.

Pennsylvania—Unloading stocks depresses market. Normal level, especially in view of crude advance, expected to be regained soon.

California—Market irregular with tendency to soften. Prices unchanged, but weaker. Neutrals strong.

Chicago—More cheerful sentiment in retail division helping gasoline. Burning oils strong.

Representative Mid-Continent Quotations on Crude Oil and Refined Products Basis Oklahoma (Group 3)



Kerosene and Furnace Oil Demand Runs Ahead of Expectations in Cold Eastern Territory

By C. O. WILLSON
New York Bureau, The Oil and Gas Journal

NEW YORK, Jan. 7.—Prices generally in the eastern refinery markets were unchanged over the past week with spot trading not particularly active in any product. There were several buyers who were willing to purchase kerosene for delivery over the next 30 days but sellers were offering limited quantities including two or three companies which have supplies in excess of their own regular requirements. Kerosene meeting the usual specifications with a 41 to 43 gravity was generally quoted at 6 cents in New York Harbor and other points along the coast. Several sellers were asking and obtaining the same price for range oil and No. 1 furnace oils.

Cargo buyers of all of these products were generally being asked a minimum of 5 cents at the Gulf. One buyer said it would require 5¼ to 5½ cents to secure any sizable quantity of kerosene at the Gulf for immediate shipment either export or domestic. There was some off specification material being offered at slightly lower prices but this product apparently does not interest buyers in this territory where competitive conditions in the tank wagon markets demand quality products.

The Nos. 2, 3 and 4 furnace oils were more freely available both from local refiners and water terminal operators and also at the Gulf Coast. The prevailing market here for these grades was 4¾ cents and this price was also generally accepted. A check showed that refiners and distributors of these three grades in most cases have stocks as large or larger than last year but this situation does not apply to kerosene and No. 1 furnace oils.

Kerosene Demand

In regard to kerosene and No. 1 furnace oils including range oils the demand is running ahead of expectations. Some distributors have been amazed by the demand for these products. The consumption appears to be scattered throughout New England, New York State and parts of Pennsylvania and New Jersey. In some towns and cities, sellers of heating stoves using a high gravity distillate or kerosene as fuel, have been highly successful. The selling of this type heater including range oil burners is not new in this territory because for several years it has represented a substantial volume of business in New England. But this year the territory has widened. One salesman explains that it is a phase of economy as well as convenience for home owners. Instead of heating an entire house with a coal fired furnace the owner has one or more of these small oil heaters and heats the rooms that are actually needed. He also cites cases in which store and office buildings that are only partially rented are being heated on the same basis. The heaters are installed in the rooms which are rented. This type of oil heater is invading parts of New York City.

In the absence of complete figures on the number of new installations it is impossible to gauge the importance of this development accurately but it is certain that the demand for kerosene and high gravity distillates is running ahead of last year by a wide margin for many companies. "We do not know where it is going but we know we are selling more than we have in several years," was the comment of one sales manager.

Export Situation

In the export end there have also been some interesting developments in regard to kerosene. Based on Bureau of Mines reports, the export demand for the first 10 months of 1934 was 18.4 per cent ahead of last year and over the past 30 days the demand has been heavier than it was the first 10 months.

The source of the inquiries indicates that the advent of Iraq crude oil for refining at European refineries may have something to do with this extra demand. A gradual shifting to Iraq crude oil is under way at three refineries in France and there will be more in the near future. The deliveries of Iraq crude oil at two Mediterranean terminals will be around 75,000 bbls. daily within the next three to six months and this will have to be absorbed by refining interest affiliated with the owners of the Iraq company which includes Anglo-Persian, Shell, French interests, Standard of New Jersey and Socony-Vacuum. This crude in part will replace crude which has been coming from several other countries. Iraq is not a desirable crude for the production of kerosene due to the sulphur content and the distillation range and it is already apparent that in shifting to the Iraq crude, certain operators will have to increase their outside purchases of kerosene. This has already thrown some additional kerosene business to this country. Just how much of a permanent market factor this will be, it will not be possible to determine for several months. This country produces the bulk of the crude oils which are most suitable for the refining of quality kerosenes and with prevailing tank car prices as high or higher than middle octane gasolines at most refining centers, this situation may have permanent importance in future refinery operations.

Gulf Market Stronger

When asked about the gasoline market many tank car sales managers in this territory point to the improvement in the Gulf Coast market as an indication of conditions which should be reflected in local advances in the near future. The only change locally is that at least two sellers who have been quoting a low octane motor at 5¼ cents have advanced their prices to 5½ cents making a spread of 5¼ to 5½ cents for this grade instead of a flat price of 5¼ cents. The other grades are unchanged at 5½ cents for middle octane, 5¾ cents for 65 octane and above 6 cents for ethylized regular grade. There is no important underselling of these tank car postings at this time.

Market observers in stressing the strength of gasoline point to the fact that the prevailing quotations at the Gulf Coast would support a one-fourth or one-half cent advance here. The minimum price on low octane motor for coastwise shipment is now 5 cents with middle octane material ranging up to 5½ cents. If these prices continue it is assumed that they will encourage refiners and water terminal operators here to advance their quotations.

In the export end gasoline quotations are also stronger at the Gulf although there are few inquiries and so far as known no important cargo business has been placed here since the start of the year. The Rumanian market is stronger and sellers here are advancing their quotations in line with that market.

Prices and demand for other refinery products showed no change over the past week.

Gasoline Price Situation Improves in East

NEW YORK, Jan. 8.—The gasoline price situation in this territory improved substantially this morning when the Socony-Vacuum Oil Co., Inc., advanced tank car, dealer and service station quotations at several points which have been below normal. At Buffalo the company advanced the service station prices 5½ cents and the posted dealer price 4 cents. At Rochester the advance in gasoline retail price was 3½ cents and posted dealer 2 cents. The new prices at both points are 13½ cents posted dealer and 17 cents retail, including 3-cent state and 1-cent federal taxes.

At Utica the service station price was advanced 4 cents to 16½ cents, with the posted dealer 3½ cents less. Tank car prices at these points were advanced to their normal relationship to the service station quotations.

The advances today end the price war conditions at these and other important consuming sections, which have prevailed for several weeks. The Standard Oil Co. of New Jersey since the first of the year has also made scattered advances at several points in its marketing territory. Since it was predicted yesterday the improvement in the retail price situation would result in a general advance of 1 cent in tank car and small barge prices along the Atlantic seaboard today, due to the supreme court decision, it was felt that this advance might be postponed indefinitely.

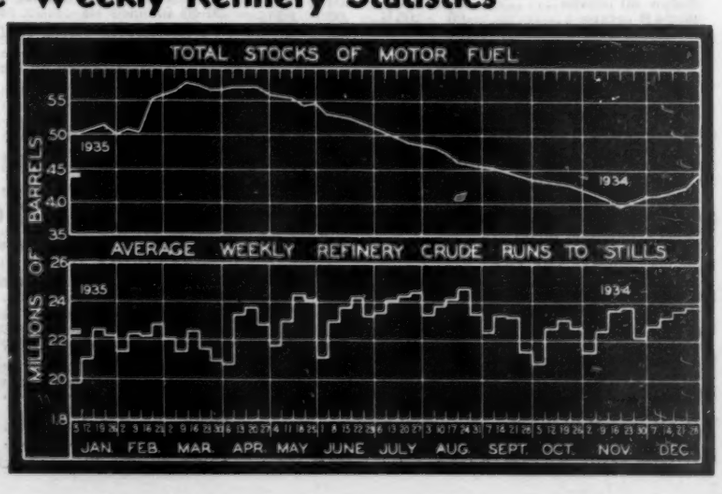
American Petroleum Institute Weekly Refinery Statistics

WEEK ENDING JANUARY 5, 1935

	Capacity reporting per cent	Daily crude runs (bbls.)	Finished motor fuel (bbls.)	Gas oil and fuel oil (bbls.)
East Coast	100.0	470,000	12,365,000	12,572,000
Appalachian	93.3	91,000	1,840,000	1,373,000
Indiana, Illinois, Kentucky	94.6	273,000	7,350,000	5,096,000
Oklahoma, Kansas, Missouri	83.7	219,000	4,285,000	3,865,000
Inland Texas	47.6	82,000	1,211,000	1,715,000
Texas Gulf	97.7	529,000	5,140,000	10,320,000
Louisiana Gulf	96.4	114,000	975,000	4,285,000
North Louisiana and Arkansas	83.7	41,000	230,000	453,000
Rocky Mountain	66.7	28,000	621,000	732,000
California	96.9	395,000	10,159,000	67,591,000
Total United States	89.8	2,242,000	44,176,000	108,002,000

WEEK ENDING DECEMBER 29, 1934

East Coast	100.0	476,000	11,917,000	12,861,000
Appalachian	93.3	97,000	1,873,000	1,433,000
Indiana, Illinois, Kentucky	94.6	287,000	7,128,000	5,236,000
Oklahoma, Kansas, Missouri	83.7	246,000	4,217,000	3,888,000
Inland Texas	47.6	86,000	1,281,000	1,707,000
Texas Gulf	97.7	580,000	5,352,000	10,852,000
Louisiana Gulf	96.4	130,000	1,096,000	4,356,000
North Louisiana and Arkansas	83.7	51,000	236,000	441,000
Rocky Mountain	66.7	32,000	648,000	754,000
California	96.9	397,000	10,221,000	68,028,000
Total United States	89.8	2,382,000	43,969,000	109,556,000



REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement except as otherwise noted

The following quotations are exclusive of the federal excise taxes of 1 cent a gallon on gasoline and 4 cents on lubricating oils.

Refinery Gasolines

	Jan. 8		Jan. 1	
OKLAHOMA (Group 3)—				
U. S. Motor grades:				
Below 63 octane	.03¾	.03⅞	.03¾	.03¾
63-70 octane	.04⅜	.04⅝	.04⅜	.04⅝
60-62 400 grades:				
Below 63 octane	.03¾	.03⅞	.03¾	.03⅞
63-70 octane	.04⅜	.04⅝	.04⅜	.04⅝
64-66 375	.04	.04¼	.04	.04¼
68-70 360	.04¼	.04⅜	.04¼	.04⅜
NORTH TEXAS—				
U. S. Motor grades:				
Below 63 octane	.03¾	.03⅞	.03¾	.03¾
63-70 octane	.04⅜	.04½	.04⅜	.04½
60-62 400	.03¾	.03⅞	.03⅜	.03¾
64-66 375	.03⅞	.04	.03⅞	.04
NORTH LOUISIANA (Ark., N. La. & Miss. del.)—				
U. S. Motor grades:				
Below 63 octane	.04¼	.04⅜	.04¼	.04⅜
63-70 octane	.05⅜		.05⅜	
60-62 400	.04¼	.04½	.04¼	.04½
ARKANSAS (Ark., N. La. & Miss. del.)—				
U. S. Motor grades:				
Below 63 octane	.04¼	.04⅜	.04¼	.04⅜
63-70 octane	.05⅜		.05⅜	
CHICAGO (based on Oklahoma Group 3)—				
U. S. Motor grades:				
Below 63 octane	.03¾	.04	.03¾	.04
63-70 octane	.04½	.04¾	.04⅜	.04⅝
60-62 400	.03¾	.04	.03¾	.04
64-66 375	.04	.04¼	.04	.04¼
68-70 360	.04¼	.04½	.04¼	.04½
Aviation fighting grade	.04⅜	.05	.04⅞	.05
PENNSYLVANIA (inland refineries)—				
58-60 U. S. Motor:				
Below 60 octane	.04½		.04⅝	.04¾
60-64.9 octane	.05⅝	.05¾	.05⅞	.06⅛
65-70 octane	.06	.06⅛	.06¼	.06⅜
68-70 350	.05½		.06⅛	.06¼
CALIFORNIA (domestic movement)—				
54-58 U. S. Motor	.07	.08	.07	.08
58-60 400	.08	.09	.08	.09
EAST COAST—				
U. S. Motor, below 60 octane:				
*New York	.05¼		.05¼	
Baltimore	.05¼		.05¼	
U. S. Motor, 60-64 octane:				
*New York (Bayonne)	†.05½		†.05½	
Philadelphia	.05½		.05½	
Boston	.05½		.05½	
Baltimore	.05½		.05½	
Charleston, S. C.	.05½		.05½	
U. S. Motor, 65 and above:				
*New York	‡.05¾		‡.05¾	
Philadelphia	.05¾		.05¾	
Boston	.05¾	.06	.05¾	.06
Baltimore	.05¾		.05¾	
Charleston, S. C.	.05¾		.05¾	

*All grades of gasoline one-fourth cent less for small barge shipments.
†For New Jersey delivery, 6¼ cents.
‡For New Jersey delivery, 6½ cents.

GULF COAST (domestic)—				
U. S. Motor:				
Below 60 octane	.04¾	.05	.04¾	.05
60-64.9 octane	.05	.05¼	.05	.05¼
65 octane and higher	.05¼		.05¼	

Naphthas

	Jan. 8		Jan. 1	
PENNSYLVANIA (inland refineries)—				
50-52 (blending)	.04½		.04⅝	
52-54 450 (blending)	.04½		.04⅝	
54-56 450 (blending)	.04½		.04⅝	
50-52 450 (blending)	.04⅛		.04⅜	
CHICAGO (based on Oklahoma Group 3)—				
50-52 450 (blending)	.03¾	.04	.03¾	.04
Cleaners' naphtha, 56-58 gr., 200 i.b.p., 320 e.p.	.06¾	.07	.06¾	.07
Lacquer diluent, 180 i.b.p., 250 e.p.	.07¾	.08	.07¾	.08
Lacquer diluent, 140 i.b.p., 200 e.p.	.08¾	.09	.08¾	.09
Rubber solvent, 68-70 gr., 100 i.b.p., 300 e.p.	.06¾	.07	.06¾	.07
Stoddard solvent, 300 i.b.p., 410 e.p. ,over 33° flash	.06¼	.06½	.06¼	.06½
Pet. thinner, 290-300 i.b.p., 415 e.p., over 33° flash	.06¼	.06½	.06¼	.06½
V.M.&P. naphtha, 56-58 gr., 190-200 i.b.p., 330 e.p.	.06¾	.07	.06¾	.07
Petroleum spirits	.05¾	.06	.05¾	.06

Natural Gasolines

	Jan. 8		Jan. 1	
OKLAHOMA (Group 3)—				
Gradt 26-70	.03½		.03⅝	
Grade 18-55	.04⅛	.04¼	.04¼	.04⅜
Low vapor pressure grades:				
*14 lb. v.p. (max.)	.04⅝	.04⅞	.04¾	.05
*12 lb. v.p. (max.)	.04¾	.04⅞	.04⅞	.05
NORTH TEXAS—				
Grade 26-70	.03¼		.03⅜	
Grade 18-55	.03⅞	.04⅛	.04	.04¼
Low vapor pressure grades:				
*14 lb. v.p. (max.)	.04¼	.04½	.04⅜	.04⅝
*12 lb. v.p. (max.)	.04⅝	.04⅞	.04¾	.05
NORTH LOUISIANA (Ark., N. La. & Miss. del.)—				
Grade 26-70	.03¾	.03⅞	.03⅞	.04
CALIFORNIA—				
75-85 375	.06½	.06¾	.06½	.06¾

*Prices nominal, virtually no spot market.

Kerosenes

(All kerosenes water white)

	Jan. 8		Jan. 1	
OKLAHOMA (Group 3)—				
41-43	.03⅜	.03½	.03⅝	.03½
42-44	.03½	.03⅝	.03½	.03⅝
NORTH TEXAS—				
40-41	.03¼	.03¼	.03⅛	.03¼
41-43	.03⅜	.03½	.03⅜	.03½
NORTH LOUISIANA (Ark., N. La. & Miss. del.)—				
41-43	.03⅜		.03⅜	
ARKANSAS (Ark., N. La. & Miss. del.)—				
41-43	.03⅜		.03⅜	
PENNSYLVANIA (inland refineries)—				
45	.04¼	.04½	.04⅜	.04½
46	.04⅜	.04⅝	.04½	.04⅝
47	.04½	.04¾	.04⅝	.04¾
CHICAGO (based on Oklahoma Group 3)—				
41-43	.03½	.03⅝	.03⅜	.03½
42-44	.03⅝	.03¾	.03½	.03¾
CALIFORNIA (Pacific Coast consumption)—				
38-40 high burning test	.04¾	.05¼	.04¾	.05¼
NEW YORK (Bayonne, N. J.)—				
41-43	.05¼	.06	.05¾	.06
GULF COAST (domestic)—				
41-43	.04½	.04⅝	.04½	.04⅝

Petroleum Coke

(Prices per ton f.o.b. refineries in Chicago area)
(Refineries will absorb freight to 80 cents a ton)

	Jan. 8	Jan. 1
Still run	6.00	6.00
Direct from still	7.00	7.00
Egg, nut, pea	8.50	8.50
Lump	8.50	8.50

Furnace Oils and Tractor Fuels

(Zero cold test under 190° flash and good odor)

	Jan. 8		Jan. 1	
OKLAHOMA (Group 3)—				
32-36 straw	.03⅛	.03¼	.03⅛	.03¼
36-38 straw	.03⅛	.03¼	.03⅛	.03¼
38-40 straw	.03¼	.03⅜	.03¼	.03⅜
38-40 prime white	.03⅜	.03½	.03⅜	.03½
NORTH TEXAS—				
38-40 straw	.03¼	.03⅜	.03¼	.03⅜
NORTH LOUISIANA (Ark., N. La. & Miss. del.)—				
36-40 furnace oil	.03⅜	.03¼	.03⅜	.03¼
ARKANSAS (Ark., N. La. & Miss. del.)—				
32-36 furnace oil	.03⅛	.03¼	.03⅛	.03¼
CHICAGO (based on Oklahoma Group 3)—				
32-36 straw	.03¼	.03½	.03¼	.03½
38-40 straw	.03¼	.03½	.03¼	.03½
38-40 prime white	.03⅜	.03½	.03⅜	.03½
NEW YORK (Bayonne, N. J.)—				
No. 1	.05½	.05¾	.05½	.05¾
No. 2	.04¾		.04¾	
No. 4	.04¾		.04¾	

Gas Oil, Diesel Oil and Fuel Oil

(Gas oil per gal., Diesel and fuel oils per bbl.)

	Jan. 8		Jan. 1	
OKLAHOMA (Group 3)—				
32-36 gas oil, cracking stock	.02⅛	.02¼	.02⅛	.02¼
U.G.I. gas oil	.02⅛	.02¼	.02⅛	.02¼
32-36, zero to 15 gas oil	.02⅜	.02⅞	.02¾	.02⅞
28-30, No. 3 burner oil	1.10	1.15	1.10	1.15
26-30, zero to 10 fuel oil	.95	1.00	.95	1.00
24-26 fuel oil	.77½	.80	.77½	.80
20-22 fuel oil	.72½	.75	.72½	.75
Below 16 fuel oil	.60	.62½	.60	.62½
NORTH TEXAS—				
32-36 gas oil, industrial	.02⅛	.02¼	.02⅛	.02¼
22-26 fuel oil	.67½	.70	.67½	.70
Below 20 fuel oil	.60	.62½	.60	.62½
NORTH LOUISIANA (Ark., N. La. & Miss. del.)—				
30-32 gas oil, zero	.03⅛	.03¼	.03⅛	.03¼
14-16 fuel oil	.70	.75	.70	.75
ARKANSAS (Ark., N. La. & Miss. del.)—				
30-32 gas oil, zero	.03⅛	.03¼	.03⅛	.03¼
32-36 gas oil	.03	.03⅛	.03	.03⅛
14-16 fuel oil	.70	.75	.70	.75
CHICAGO (based on Oklahoma Group 3)—				
32-36 gas oil, industrial	.02	.02¼	.02	.02¼
28-30 zero to 10, fuel oil	1.05	1.07½	1.02½	1.07½
26-28 zero to 10, fuel oil	.95	.97½	.92½	.97½
22-26 zero to 10, fuel oil	.82½	.87½	.82½	.85
18-22 zero to 10, fuel oil	.67½	.72½	.67½	.72½
Below 18 fuel oil	.57½	.62½	.57½	.62½

Note: Fuel oils of more than 40 cold test generally 5 to 15 cents per barrel in all these areas.

PENNSYLVANIA (inland refineries)—				
30-40	.03⅝	.04	.03¾	.04
CALIFORNIA—				
Los Angeles:				
30-34 gas oil per bbl.	1.10	1.26	1.10	1.26
27 plus Diesel	1.10	1.15	1.10	1.15
27 plus Diesel (bunkers)	1.13	1.20	1.13	1.20
12-16 (bunkers at tidewater)	.82½	.85	.82½	.85
10-16 (cargo lots)	.70	.75	.70	.75
12-17 (tank cars)	.62½	.80	.62½	.80
San Joaquin Valley:				
10-18 (tank cars)	.60	.70	.60	.70
San Francisco:				
27 plus Diesel per bbl.	1.15	1.20	1.15	1.20
27 plus Diesel (bunkers)	1.19		1.19	
10-16 (bunkers)	.90		.90	
GULF COAST—				
28-30 gas oil	.03½	.03⅝	.03½	.03⅝
28-30 Diesel (bunkers)	1.70		1.70	
Bunker C (bulk cargoes)	.85	.90	.85	.90
Bunker C (bunkers)	.95	1.00	.95	1.00
NEW YORK (Bayonne, N. J.)—				
27 plus, gas oil	.04½	.04¾	.04½	.04¾
28-30, Diesel (lighterage 6½ cents per bbl.)	1.89		1.89	
28-30 Diesel (tank cars)	.04¾		.04¾	
*Bunker C (to ocean-going ships in N. Y. harbor)	1.15		1.15	

*Lighterage charge 5 cents per barrel additional.

Neutral Oils

(Vis. at 100° F. except Pennsylvania, and color N.P.A.)

	Jan. 8		Jan. 1	
OKLAHOMA (Group 3)—				
Zero to 10 Cold Test:				
150-3	.10		.10	
180-3	.11¼		.11¼	
180-4	.10¾		.10¾	
200-3	.11¾		.11¾	
200-4	.11¼		.11¼	
240-3	.13¾		.13¾	
240-4	.13¼		.13¼	
280-3	.14¾		.14¾	
280-4	.14		.14	
300-3½	.15¼		.15¼	
400-4	.17¼		.17¼	
100-2 paraffin oil	.05¾		.05¾	
15-20 Cold Test:				
200-3	.10¾		.10¾	
200-4	.10¼		.10¼	
240-3	.12¾		.12¾	
240-4	.12¼		.12¼	
280-3	.13¾		.13¾	
280-4	.13		.13	
GULF COAST—				
Pale Oils:				
200-3	.07¼	.07½	.07¼	.07½
300-3	.07½	.08	.07½	.08
500-3½	.08½	.09	.08½	.09
750-3½	.09	.09¼	.09	.09¼
1,200-3½	.09½	.09¾	.09½	.09¾
2,000-4	.09¾	.10	.09¾	.10
Red Oils:				
200-5-6	.07	.07¼	.07	.07¼
300-5-6	.07¼	.07½	.07¼	.07½
500-5-6	.08	.08½	.08	.08½
750	.08½	.09	.08½	.09
1,200-5-6	.09¼	.09½	.09¼	.09½
CALIFORNIA—				
Pale Oils:				
100-2½-3	.12½	.14½	.12½	.14½
200-2½-3	.12½	.14½	.12½	.14½
300-3-3½	.12½	.14½	.12½	.14½
350-3-4	.12½	.14½	.12½	.14½
400-3-4	.12½	.14½	.12½	.14½
450-3-4	.12½	.14½	.12½	.14½
550-3-4	.12½	.14½	.12½	.14½
600-3-4	.12½	.14½	.12½	.14½
Red Oils:				
200-4-5	.12½	.14½	.12½	.14½
300-5-6	.12½	.14½	.12½	.14½

350-5-6	.12½	.14½	.12½	.14½
400-5-6	.12½	.14½	.12½	.14½
450-5-6	.12½	.14½	.12½	.14½
500-5-6	.12½	.14½	.12½	.14½
600-5-6½	.12½	.14½	.12½	.14½
700-6½ plus	.12½	.14½	.12½	.14½
750-6½ plus	.12½	.14½	.12½	.14½
900-6½ plus	.12½	.14½	.12½	.14½
PENNSYLVANIA—				
150 vis. at 70° F., 3 color, 400-405 flash:				
Zero pour test	.24½	.25	.24	.24½
10 pour test	.23½	.24	.23	.23½
15 pour test	.23	.23½	.22½	.23
25 pour test	.22	.22½	.22	.22½
180 vis. at 70° F., 3 color:				
25 pour test	.24½	.25	.25	.25½
200 vis. at 70° F., 3 color:				
Zero pour test	.30½	.31	.31	.31½
10 pour test	.29½	.30	.30	.30½
15 pour test	.29	.29½	.29½	.30
25 pour test	.28	.28½	.28	.29

Bright and Steam Refined Stocks

	Jan. 8		Jan. 1	
OKLAHOMA (Group 3)—				
Bright Stocks:				
190-200 D	.16½		.16½	
150-160 D, 0-10	.13½		.13½	
150-160 D, 10-25	.13		.13	
150-160 24-40	.12½		.12½	
150-160 E	.12½		.12½	
Steam refined:				
630 light green (treated)	.07½	.08	.08	.08½
600 light green (untreated)	.06	.08	.06	.08
600 dark green (untreated)	.04½	.07	.04½	.07
PENNSYLVANIA—				
Bright Stocks (Pennsylvania grade, No. 8 color, 145-50 at 210; 540-550 flash):				
10 pour test	.17½	.18½	.19½	.20½
15 pour test	.16½	.17½	.18½	.19½
20 pour test	.15	.16	.18	.20
25 pour test	.14½	.15½	.15½	.16½
Steam refined:				
600	.08	.09	.09	.10
650	.10	.11	.12	.13
600 Pennsylvania flash	.11	.12	.13	.14
630 flash	.16	.17	.17	.18
600 Warren E filtered	.12	.13	.13	.14

Wax and Petrolatum

(Prices per pound)

	Jan. 8		Jan. 1	
OKLAHOMA (Group 3)—				
124-126 white crude scale	.03⅛	.03¼	.03⅛	.03¼
PENNSYLVANIA—				
122-124	.0315	.0320	.0325	.0330
124-126	.0320	.0325	.0330	.0335
NEW YORK—				
Wax (a.m.p.) in bags fully refined:				
120-122	.0420	.0430	.0420	.0430
123-125	.0440	.0460	.0440	.0460
125-127	.0445	.0470	.0445	.0470
130-132	.05	.0510	.05	.0510
133-135	.0545	.0570	.0545	.0570
135-137	.0570	.0595	.0570	.0595
124-126 crude scale	.0305	.03125	.0305	.03125
Petrolatum in barrels in carload lots:				
Dark green	.01⅞		.01⅞	
Amber	.02⅛	.03	.02⅛	.03
Extra amber	.03	.03½	.03	.03½
Lily white	.06⅝	.06¾	.06⅝	.06¾
Snow white	.07¾	.07⅞	.07¾	.07⅞
Cream	.05⅝	.05¾	.05⅝	.05¾
CHICAGO (f.o.b. switching district)*—				
122-124 wax	.0490	.0500	.0490	.0500
125-127 wax	.0515	.0525	.0515	.0525
127-129 wax	.0530	.0540	.0530	.0540
130-132 wax	.0590	.0600	.0590	.0600
132-134 wax	.0615	.0625	.0615	.0625

*Cents per pound on carlot orders in burlap bags of 225 lbs. approx. Add 3° F. a.m.p.

Export Prices

GASOLINE

	Jan. 8		Jan. 1	
GULF COAST—				
U. S. Motor	.04⅛	.04¼	.04⅛	.04¼
60-62 400	.04¼	.04⅜	.04¼	.04⅜
61-63 390	.04½	.04⅝	.04½	.04⅝
64-66 375	.04¾	.04⅞	.04¾	.04⅞
LOS ANGELES, CALIF.—				
U. S. Motor grades:				
53-55 octane	.04	.04¼	.04	.04¼
55-65 octane	.04¼	.04½	.04¼	.04½
65-67 octane	.04½	.04¾	.04½	.04¾
67-69 octane	.04¾	.05	.04¾	.05
Above 69 octane	.05	.05¼	.05	.05¼
58-60 400 endpoint	.04¾	.05½	.04¾	.05½

KEROSENE

GULF COAST—				
41-43 prime white	.04¼	.04⅜	.04¼	.04⅜
41-43 water white	.04½	.04⅝	.04½	.04⅝
44 water white	.04¾		.04¾	
LOS ANGELES, CALIF.—				
41-43 water white	.04½	.04¾	.04½	.04¾

LUBRICANTS

NEW YORK (f.a.s. in bbls.)—				
Cylinder Stocks:				
600 Warren E	.19	.20	.19	.20
600 S.R. unfiltered	.14½	.15	.14½	.15
650 S.R. unfiltered	.17	.18	.17	.18
600 flash S.R.	.18	.18½	.18	.18½
630 flash S.R.	.22½	.23	.22½	.23
Bright Stocks:				
8 color	.22½	.23	.22½	.23
6½ plus color, in dilution	.21	.21½	.21	.21½

NEUTRAL OILS

200-3 color	.34½	.35	.34½	.35
150-3 color	.28	.29	.28	.29

PARAFFIN WAX (Fully Refined)

NEW YORK (prices per pound):				
120-122 a.m.p.	.0405	.0425	.0405	.0425
123-125 a.m.p.	.0435	.0455	.0435	.0455
125-127 a.m.p.	.0440	.0465	.0440	.0465
128-130 a.m.p.	.04¾	.0490	.04¾	.0490
130-132 a.m.p.	.0495	.0505	.0495	.0505
133-135 a.m.p.	.0540	.0565	.0540	.0565
135-137 a.m.p.	.0565	.0590	.0565	.0590

Crude Oil Gravity Table

Gravity—	Oklahoma and Kansas 1	North Texas, Central Texas and East Central Texas 2	North Louisiana and Arkansas 3	Gray County, Texas 4	Carson, Hutchinson and Moore Counties, Texas 5	Conroe, Texas 6	Salt Creek, Wyo. 7	Gulf Coast, Texas and Louisiana 8	Gulf Coast, Texas and Louisiana 9	Cotton Valley, Louisiana 10
Below 20	....	....	....	....	....	....	....	$.82	$.82	....
20-20.9	....	....	....	....	....	....	....	.84	.84	....
21-21.9	....	....	....	....	....	....	....	.86	.86	....
22-22.9	....	....	....	....	....	....	....	.88	.88	....
23-23.9	....	....	....	....	....	....	....	.90	.90	....
24-24.9	....	....	....	....	....	....	....	.92	.92	....
Below 25	*$.76	....	....	....	....	....	....	....	....	$.70
25-25.9	*.78	....	....	....	....	....	....	.94	.94	.72
26-26.9	*.80	....	....	....	....	....	....	.96	.96	.74
27-27.9	*.82	....	....	....	....	....	....	.98	.98	.76
28-28.9	*.84	....	....	....	....	....	....	1.00	1.00	.78
Below 29	.84	$.79	$.79	....	....	....	$.84	....	....	....
29-29.9	.86	.81	.81	....	....	....	.86	1.02	1.02	.80
30-30.9	.88	.83	.83	....	....	....	.88	1.04	1.04	.82
31-31.9	.90	.85	.85	....	....	....	.90	1.06	1.05	.84
32-32.9	.92	.87	.87	....	....	....	.92	1.08	1.06	.86
33-33.9	.94	.89	.89	....	....	....	.94	1.10	1.07	.88
34-34.9	.96	.91	.91	....	....	....	.96	1.12	1.08	.90
Below 35	....	....	....	$.79	$.69	....	....	....	....	....
35-35.9	.98	.93	.93	.81	.71	$1.09	.98	1.13	1.09	.92
36-36.9	1.00	.95	.95	.83	.73	1.11	1.00	1.13	1.10	.94
37-37.9	1.02	.97	.97	.85	.75	1.13	1.02	1.13	1.11	.96
38-38.9	1.04	.99	.99	.87	.77	1.15	1.04	1.13	1.12	.98
39-39.9	1.06	1.01	1.01	.89	.79	1.17	1.06	1.13	1.13	1.00
40 and over	1.08	1.03	1.03	.91	.81	1.19	1.08	1.13	1.14	1.02

Effective December 3, Panhandle Refining Co., purchasing oil in North Texas, posted below 29 degrees, 68 cents; 29-29.9 degrees, 70 cents, with 2 cents added for each additional degree up to 40 and over, at 92 cents.

*The following companies purchasing crude oil in Kansas or Oklahoma, or both, begin their price schedule: Below 25°, 76 cents; 25-25.9°, 78 cents, with 2 cents added for each degree upward to 40 and over at $1.08; Carter Oil Co., Magnolia Petroleum Co., Pure Oil Co., Rock Island Refining Co., Shell Petroleum Corp., Sinclair Prairie Oil Marketing Co., Skelly Oil Co., and Wilcox Oil & Gas Co. All others begin their schedules at below 29°, 84 cents, excepting Philtex Oil Co., which begins with below 31° at 88 cents.

Column 1—Effective September 29, Texas Co. of Oklahoma; Stanolind Crude Oil Purchasing Co. in Kansas and Oklahoma; Anderson & Prichard, Inc., in Oklahoma; Bell Oil & Gas Co. in Oklahoma; Carter Oil Co. in Oklahoma and Kansas; Deep Rock Oil Co. in Oklahoma; Derby Oil Co. in Kansas; Globe Refining Co. in Oklahoma; Golden Rule Refining Co. in Kansas; Gypsy Oil Co. in Oklahoma and Kansas; Kanotex Refining Co. in Kansas; Magnolia Petroleum Co. in Oklahoma; Mid-Continent Petroleum Corp. in Oklahoma; National Refining Co. in Kansas and Oklahoma; Shell Petroleum Corp. in Kansas and Oklahoma; Sinclair Prairie Oil Marketing Co. in Kansas and Oklahoma; Texas Co. in Oklahoma; Tide Water Oil Co. in Oklahoma; Vickers Refining Co. in Kansas; Continental Oil Co. in Kansas and Oklahoma; Empire Pipe Line Co. in Oklahoma and Kansas; Philtex Oil Co. in Kansas and Oklahoma; Pure Oil Co. in Oklahoma; Skelly Oil Co. in Kansas. Effective September 29, by White Eagle Oil Corp. in Kansas; October 1 by Barnsdall Refineries, Inc., in Oklahoma.

Column 2—Effective September 29, by Texas Co., Stanolind Crude Oil Purchasing Co., Humble Oil & Refining Co., Sinclair Prairie Oil Marketing Co., Gulf Pipe Line Co., Magnolia Petroleum Co., Bell Oil & Gas Co., Continental Oil Co. Effective September 29, in the Van Pool, Van Zandt County, Pure Oil Co. posted below 29°, 84 cents, with 2 cents added for each degree up to 40 and over at $1.08.

Column 3—Effective September 29, by Texas Co., Magnolia Petroleum Co., Gulf Refining Co. Effective December 22, Stanolind Oil & Gas Co. in Pine Island, Louisiana, and Marion County, Texas, posted below 29°, 79 cents, with 2 cents added for each degree up to 40 and over at $1.03. Effective March 17, 1934, by Standard Oil Co. of Louisiana and Louisiana Oil Refining Co. Starting with below 25°, 71 cents, adding 2 cents for each degree upward to 40 and over at $1.03.

Column 4—Effective September 29, by Texas Co., Humble Oil & Refining Co., Magnolia Petroleum Co., Sinclair Prairie Oil Marketing Co., and H. F. Wilcox Oil & Gas Co. On same day Philtex Oil Co. posted below 31°, 71 cents, with 2 cents added for each degree up to 40 and over at 91 cents. Effective June 1, 1934, Texas Co. (see note above).

Column 5—Effective September 29, by Texas Co., Humble Oil & Refining Co., Gulf Pipe Line Co., Magnolia Petroleum Co., Wilcox Oil & Gas Co., Continental Oil Co. On same day, Philtex Oil Co. posted below 31°, 61 cents, with 2 cents added for each degree upward to 40 and over at 81 cents. Effective June 1, 1934, Texas Co. (see note above).

Column 6—Effective September 29, by Humble Oil & Refining Co. and Tide Water Oil Co., and on September 30, by Texas Co., which on September 29 had posted a schedule of $1.07 to $1.12 with a 1-cent spread on each degree.

Column 7—Effective September 29, by Stanolind Oil & Gas Co.

Column 8—Effective September 29, by Humble Oil & Refining Co., Gulf Pipe Line Co., Shell Petroleum Corp., Pure Oil Co., Sinclair Prairie Oil Marketing Co. On October 3, Magnolia Petroleum Co. posted Lockport, Louisiana; 20-20.9°, 84 cents, with 2 cents added for each degree upward to 34 and over at $1.12, and in Cameron Meadows and Iowa, Louisiana; below 20°, 73 cents, with 2 cents added for each degree up to 34 and over at $1.02. These prices were 2 cents higher on each degree than Magnolia prices posted on September 29. Effective September 29, Shell Petroleum Corp. posted in Iowa, Louisiana, district: Below 20°, 76 cents, with 2 cents added for each degree upward to 34° and over at $1; and in Black Bayou and White Castle, Louisiana: Below 20°, 80 cents, with 2 cents added for each degree upward to 34° and over at $1.10.

Column 9—Effective September 30, Texas Co. (On September 29, Texas Co. had posted a schedule of 2 cents on each degree, but changed it on September 30.)

Column 10—Effective September 29, by Louisiana Oil Refining Co.

(California Crude Oil Prices on Page 73)

Crude Oil Prices

Oklahoma, Kansas, North Central and East Central Texas

East Texas $1.00
Corsicana (heavy) (June 17, 1933)* ..... .30
Other fields ..... (See gravity table)

Note—In East Texas, effective September 29, 1933, by Texas Co., Sanolind Crude Oil Purchasing Co., Humble Oil & Refining Co., Shell Petroleum Corp., Gulf Pipe Line Co., Tide Water Oil Co., Sinclair Prairie Oil Marketing Co., Magnolia Petroleum Co., Sun Oil Co., Panola Pipe Line Co., Empire Oil & Refining Co., and Atlas Pipe Line Co. posted 60 cents per barrel in East Texas, but on November 3 resumed its posted price of $1 per barrel, making it retroactive to October 22.

*Magnolia Petroleum Co.

West Texas

Crane, Upton, Crockett, Howard, Glasscock, Mitchell (Sept. 29, 1933) ..... $.70
Ector, Winkler and Pecos Counties and Lea County, New Mexico (Sept. 29, 1933) ..... .75
Pecos County, Yates shallow Pool (Sept. 29, 1933)* ..... .65
Jones and Fisher Counties*. See gravity table

Note—Effective September 29, 1933, by Humble Oil & Refining Co., Texas Co., Gulf Pipe Line Co., Shell Petroleum Corp., Magnolia Petroleum Co., and by Stanolind Oil & Gas Co. in Winkler County, Texas.

*Shell Petroleum Corp.

Gulf Coast

Grade A and Grade B specifications discontinued by leading buyers.
..... (See gravity table)
Tomball (see note)* $1.15
Livingston (Sept. 29, 1933)† 1.00
Cleveland (Jan. 11, 1934) 1.00
Greta (Sept. 29, 1933) ..... .85
Refugio, light ..... (See gravity table)
Refugio, heavy (Sept. 29, 1933)‡ ..... .85
Markham and High Island ..... (See Gulf Coast gravity table)
Conroe ..... (See Conroe gravity table)
Bosco, La. (Oct. 15, 1934)§ $1.02

Note—Tomball, effective September 29, by Humble Oil & Refining Co. and October 2 by Magnolia Petroleum Co., and November 10 by Stanolind Crude Oil Purchasing Co.

*Greta posted by Texas Co. †Shell Petroleum Corp. ‡Refugio heavy by Humble Oil & Refining Co. Cleveland (Liberty County) posted by Magnolia Petroleum Co. §Bosco posted by Pure Oil Co.

South Central and Southwest Texas

(See note below table)

Darst Creek ..... $.87
Mirando ..... .80
Luling (Sept. 29, 1933) ..... .75
Pettus 1.05
Salt Flat ..... .87
Lytton Springs (Sept. 29, 1933) ..... .95
Duval County (Sept. 29, 1933) ..... .80
Saxet ..... .85

Note—Effective on September 29 by Humble Oil & Refining Co. in Darst Creek, Mirando, Pettus, Salt Flat and Saxet. Effective September 29 in Darst Creek by Gulf Pipe Line Co. and Texas Co. Effective October 2 by Magnolia Petroleum Co. Effective in Pettus and Salt Flat on September 29 by Humble Oil & Refining Co. and Gulf Pipe Line Co. Luling and Lytton Springs by Magnolia Petroleum Co. Duval County by Texas Co. Saxet, effective September 29, by

(Continued on Page 78)

TANK WAGON MARKETS

Quotations for gasoline and kerosene in United States, as furnished by the larger marketing concerns, include taxes

January 8, 1935

Taxes

The gasoline quotations given in the following tables include the 1-cent Federal tax, as well as state, county and city taxes. The gasoline quoted is the regular or standard grade. In most marketing areas a third grade and a premium grade are also available.

Discounts

Under the standard form of commercial consumer contract which went into effect March 1, 1934, save in California, Oregon, Washington, Arizona and Nevada, a discount of 1 cent a gallon off tank wagon or 3 cents a gallon off retail prices is permitted for purchases running between 4,000 and 10,000 gallons a month, or 4 cents a gallon off retail prices for purchase in lots of more than 10,000 gallons a month. The minimum delivery is 25 gallons.

Rocky Mountain District

CONTINENTAL OIL CO.

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Denver, Colo.	18.0	20.0	5.0	12.5
Pueblo	18.0	20.0	5.0	11.0
Grand Junction	16.0	18.0	5.0	15.0
Casper, Wyo.	18.0	20.0	5.0	11.5
Cheyenne	18.0	20.0	5.0	13.0
Butte, Mont.	21.0	23.0	5.0	17.5
Billings	22 0	24 0	6 0	16.5
Helena	23.0	25.0	6.0	17.5
Great Falls	21.5	23.5	6.0	17.5
Salt Lake, Utah	19.0	21.0	5.0	16.0
Boise, Idaho	22.5	24.5	6.0	18.0
Twin Falls	22.5	24.5	6.0	18.0
Albu'que, N. M.	18.0	20.0	*7.0	13.0

*One-cent city tax

Effective March 1, 1934, discount to dealers with or without contract throughout Continental territory: Undivided dealer discount off service station price, 4 cents; divided dealer accounts, 3½ cents.

Standard Oil Co. (Indiana)

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Chicago	14.6	16.6	4.0	8.0
Decatur, Ill.	14.4	9 9	4.0	10.2
E. St. Louis	14.1	11.0	4.0	9.5
Joliet	14.5	16.5	4.0	10.2
Peoria	14.7	9.5	4.0	10.2
Quincy	12.9	14.9	4.0	10.0
Davenport, Ia.	14.2	14.0	4.0	10.1
Des Moines	14.1	16.1	4.0	10.1
Mason City	14.4	16.4	4.0	10 1
Sioux City	14.2	16.2	4.0	9.7
Duluth, Minn.	15.0	17.0	4.0	10.4
Mankato	14.7	16.7	4.0	9.5
Minneapolis	15.0	17.0	4.0	10.4
LaCrosse, Wis.	15.7	17.7	4.0	10.8
Green Bay	15.9	17.9	5.0	10.2
Milwaukee	15.8	17.8	5.0	9.0
Madison	16.0	18.0	5.0	9 9
Detroit, Mich.	15.0	17.0	4.0	10.5
Grand Rapids	14.7	16.7	4.0	10.2
Saginaw	15.0	17.0	4.0	10.5
Evansville, Ind.	16.3	14.9	5.0	10.0
Indianapolis	16.1	18.1	5.0	10.2
South Bend	16.4	18.4	5 0	9.0
Fargo, N. Dak.	15.7	17.7	4.0	11.4
Huron, S. Dak.	16.2	18.2	5.0	11.4
Sioux Falls	15.6	17.6	5.0	10.9
Kans. C., Mo.*	13.6	15.6	4.0	7.5
Springfield	13.3	15.3	4.0	8.8
St. Louis	12.7	12.5	3.5	8.7
St. Joseph*	13.6	15.6	4.0	7.8
Wichita, Kans.	13 2	15 2	4.0	7.5
Bartlesville, Ok.	15.7	13.2	5.0	8.5

*State tax 2 cents, 1-cent city tax and 1-cent federal tax.

Discounts to dealers, effective March 1, 1934: Undivided accounts, 4 cents a gallon on Red Crown Ethyl and Standard Red Crown, divided accounts, 3½ cents a gallon on Red Crown Ethyl and Standard Red Crown.

Naphtha

	Tank wagon*
Oleum spirits	16.7
V.M.&P. naphtha	18.0
Cleaners' naphtha	18.0
Stanisol	18.0

*Prices include 3-cent Illinois tax, but not 1-cent federal tax nor 2 per cent retail occupational tax.

Prices f.o.b. Chicago, January 5, 1935. Each of above prices subject to discount of 1 cent per gallon for 150-gallon lots if covered by contracts.

Stanolex Furnace Oil in Chicago

Effective Jan. 2, 1935, f.o.b. Chicago tank wagon prices: Range oil, less than 80 gallons, 8¼ cents; 80-149 gallons, 7½ cents; 150 gallons and more, 7 cents. No. 1 (36-40 lt. stw. zero), less than 100 gallons, 8¼ cents; 100-149 gallons, 7¼ cents; 150 gallons or more, 6¾ cents; No. 2 (30-34, stw. zero), less than 150 gallons, 7¾ cents; No. 3 (22-26, zero), less than 150 gallons, 7 cents; No. 4 (12-16 zero), less than 400 gallons, 7 cents; viscosity of No. 4, 85 at 100° F.; No. 5, less than 400 gallons, 5¾ cents. For deliveries of more than stated quantities of Nos. 2, 3, 4 and 5, deduct 1 cent.

Southern District

STANDARD OIL CO. (KENTUCKY)

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Atlanta, Ga.	19.0	21.0	7.0	14.5
Augusta	18.5	20.0	7.0	14.5
Macon	19.0	21.0	7.0	14.5
Savannah	17.5	19.5	7.0	14.0
Birm'ham, Ala.	19.5	21.5	8.0	14.0
Mobile	17.0	18.0	8.0	13.0
Montgomery	18.5	19.5	8.0	15.0
Jackson, Miss.	18.5	20.5	7.0	13.0
Vicksburg	18.0	19.5	7.0	13.0
Jack'ville, Fla.	18.0	20.0	8.0	11.5
Miami	18.0	20.0	8.0	13.5
Pensacola	19.0	21.0	8.0	13.5
Tampa	18.0	20.0	8.0	13.5
Lexington, Ky.	16.5	18.5	6.0	12.5
Covington	14.5	16.5	6.0	11.5
Louisville	15.5	16.5	6.0	11.0
Paducah	14.5	15.5	6.0	11.0

In addition to the state tax of 4 cents on gasoline, Montgomery has city and county tax of 2 cents on gasoline and one-half cent on kerosene. Kerosene prices in Georgia and Mississippi include 1 cent state tax; in Alabama, an inspection fee of one-half cent on kerosene and one-fortieth cent on gasoline; in Florida an inspection fee of one-eighth cent on kerosene and gasoline. To Pensacola, Mobile and Birmingham state taxes on gasoline add 1 cent city tax.

Southwestern District

MAGNOLIA PETROLEUM CO.

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Dallas, Tex.	11.0	13.0	5.0	9.5
Fort Worth	11.0	13.0	5.0	8.0
Houston	15.0	17.0	5.0	8.0
San Antonio	16.0	18.0	6 0	9.5
El Paso	18.0	20 0	5 0	12.0
Muskogee, Ok.	15.0	17.0	5.0	6.0
Okla. City	15.0	17.0	5.0	7.0
Tulsa	15.0	17.0	5.0	7.5
Ft. Smith, Ark.	14.1	16.5	5.0	9.0
Little Rock	16.6	19.0	7.5	9.0
Texarkana	14.0	16.0	5.0	9.5

Atlantic Coast District

STANDARD OIL CO. OF NEW JERSEY

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Atl'tic City, N.J.	12 9	16.4	4.0	9.0
Newark	12.2	15.7	4 0	8 5
Annapolis, Md.	14.5	18.0	5.0	10.0
Baltimore	14.0	17.5	5.0	8.5
Cumberland	15.0	18.0	5.0	12.7
Wash'g'n, D. C.	12.0	15.5	3.0	11.5
Danville, Va.	16.5	20.0	6.0	12.9
Norfolk	15.0	18.5	6.0	11.3
Petersburg	15.5	19.0	6.0	11.4
Richmond	15.5	19.0	6.0	11.7
Roanoke	16 5	20.0	6.0	12.9
Charls'n, W.Va.	15.0	18.5	5.0	12.6
Parkersburg	14.5	18.0	5.0	11.2
Wheeling	14.0	17.5	5.0	12.2
Charlotte, N. C.	16.0	19.0	7.0	13.5
Hickory	16 0	18.5	7.0	13.7
Mt. Airy	17.0	20.0	7.0	13.8
Raleigh	16.0	18.5	7.0	13.2
Salisbury	15.5	18.0	7.0	13.6
Charleston, S.C.	15.2	18.7	7.0	11.3
Columbia	16.5	19.5	7.0	13.2
Spartanburg	17.4	20.9	7.0	13.5

Effective October 23, tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at regular price less one-half cent. Discount for kerosene, 1 cent off tank wagon price for 25 gallons or more under contract (contract not necessary in Baltimore) except in New Jersey, where no discount is given.

Nebraska

STANDARD OIL CO. OF NEBRASKA

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Omaha	15 9	17 9	5.0	10.0
McCook	16.6	17.6	5.0	10.7
Norfolk	16.3	18.3	6.0	10.4
North Platte	16.7	17.7	5.0	10.8
Scottsbluff	17.4	19.4	5.0	11.5

Note: Discounts to dealers; where service station gasoline prices are (maximum overall, including rent) as follows: Reliance, 2½ cents; Standard Red Crown, 3½ cents; Red Crown Ethyl, 3¼ cents.

Where service station gasoline prices are below normal, resellers' allowances are reduced one-half of the amount below normal, down to the following (minimum overall, including rent): Reliance, 2 cents; Standard Red Corwn, 3 cents; Red Crown Ethyl, 3 cents. Discounts to consumers for tank wagon deliveries covered only by Standard Commercial Consumers Contract, effective Jan. 1, 1935.

Central South District

STANDARD OIL CO. OF LOUISIANA

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
N. Orleans, La.	15.5	19.0	‡8.0	10.0
Baton Rouge	14.2	17.7	6.0	12.0
Alexandria	15.1	18.6	*7.0	12.0
Lafayette	16.3	19.8	‡*8.0	12.0
Lake Charles	15.2	18.7	*7.0	12.0
Shreveport	14.0	17.5	†7.0	12.0
Knoxville, Tenn.	18.7	22.2	8.0	13.5
Memphis	17.0	20.5	8.0	10.5
Chattanooga	18.5	22.0	8.0	11.0
Nashville	18.0	21.5	8.0	12.0
Bristol	14.5	17.0	8.0	14.0

*Includes city tax of 1 cent. Louisiana kerosene prices include 1-cent state tax. ‡Includes 2-cent parish tax. †Includes 1-cent parish tax.

Effective October 23, tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at dealer price less one-half cent.

Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA*

	Gasoline: Tank wagon†	Gasoline: Posted retail	Gasoline: Incl'ds tax of	Kero- tank wagon
San Francisco	16.5	18.5	4.0	12.5
Los Angeles	15.5	17.5	4.0	12.5
Fresno, Calif.	17.0	19.0	4.0	14.0
Phoenix, Ariz.	15.0	17.0	6.0	‡16.0
Reno, Nev.	19.0	21.0	5.0	15.5
Portland, Ore.	19.0	21.0	6.0	13.5
Seattle, Wash.	19.0	21.0	6.0	13.5
Tacoma	19.0	21.0	6.0	13.5
Spokane	22.0	24.0	6.0	18.0

*Retail prices posted by Standard Stations, Inc., a subsidiary.

†Prices are at company's plant or depots, as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where the discount is 1 cent.

‡Includes 5-cent state tax.

Pennsylvania, Delaware and Part of New England

ATLANTIC REFINING CO

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Phil'delphia, Pa.	14.0	16.0	4.0	9.0
Pittsburgh	15.0	17.0	4.0	10.0
Allentown	14.5	16.5	4.0	10.0
Erie	11.0	11.0	4.0	9.0
Scranton	15.0	17.0	4.0	10.0
Altoona	15.0	17.0	4.0	10.0
Dover, Del.	14.5	16.5	4.0	10.0
Wilmington	14.5	16.5	4.0	9.0
Springf'd, Mass	13.0	16.0	4.0	8.5
Worcester	13.0	16.5	4.0	9.0
Hartford, Conn.	12.0	15.5	3.0	8.5
New Haven	12.0	15.5	3.0	8.5
Providence, R.I.	11.5	15.0	3.0	8.5

Note—Tank wagon prices are those applicable to consumers purchasing lots of 100 or more gallons in one delivery.

Canada*

Imperial 3-Star Gasoline

IMPERIAL OIL, LTD.

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Hamilton, Ont.	†22.0	25.0	6.0	17.5
Toronto, Ont.	†22.0	25.0	6.0	17.5
Brandon, Man.	30.3	33.3	7.0	21.8
Winnipeg, Man.	28.7	31.7	7.0	20.2
Regina, Sask.	29.0	32.0	6.0	21.5
Saskatoon, Sask.	31.8	34.8	6.0	24.3
Edmonton, Alta.	31.2	34.2	6.0	23.7
Calgary, Alta.	28.5	31.5	6.0	21.0
Vancouver, B.C.	27.0	30.0	7.0	24.0
Montreal, Que.	24.0	27.0	6.0	17.0
St. John, N.B.	26.0	30.0	8.0	19.5
Halifax, N. S.	26.0	30.0	8.0	19.5

*Imperial gallon used in Canada. †Governed by service station price.

Maritime provinces, all dealers 4 cents off service station price. All other provinces open dealers 3 cents per gallon off service station price (except Toronto and Hamilton cities which are—open dealers 2½ cents off service station price) 1 cent additional to 100 per cent accounts.

New York and New England

SOCONY-VACUUM CO., INC.

	Gasoline: Posted dealer	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Albany, N. Y.	13.0	16.5	4.0	8.5
Met. New York	12.5	16.0	4.0	8.5
Br'klyn, Queens	12.5	16.0	4.0	8.5
Buffalo	13.5	17.0	4.0	8.0
Rochester	13.5	17.0	4.0	8.5
Syracuse	13.5	17.0	4.0	8.75
Boston, Mass	12.5	16.0	4.0	8.5
Portland, Me.	14.5	18.0	5.0	8.75
Manch't'r, N.H.	13.0	14.0	5.0	9.0
Burlington, Vt.	16.0	19.5	5.0	9.0

Ohio

STANDARD OIL CO. OF OHIO

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero- tank wagon
Ohio points	15.5	17.5	5.0	*12.5

*Includes state tax of 1 cent, effective July 22.

Retail Price Changes

Regular-Grade Gasoline and Kerosene

Continental Oil Co., December 31, reduced tank wagon and station gasoline 2 cents in Salt Lake City.

Standard Oil Co. of New Jersey, December 27, advanced tank wagon gasoline 1.6 cents and station gasoline 2.1 cents in Columbia. December 31, advanced tank wagon gasoline one-half cent and station gasoline 1 cent in Spartanburg.

Standard Oil Co. of Nebraska, December 21, reduced station gasoline two-tenths cent in North Platte; December 30, advanced it seven-tenths cent. January 2, reduced station gasoline 1 cent in McCook.

Standard Oil Co. of Kentucky, December 21, advanced tank wagon and station gasoline 1 cent in Jackson. December 21, advanced tank wagon and station gasoline 1 cent in Vicksburg; December 26, reduced tank wagon gasoline one-half cent and station gasoline 1 cent. December 21, advanced tank wagon and station gasoline one-half cent in Birmingham. December 17, advanced tank wagon gasoline 1.5 cents and station gasoline 2.5 cents in Mobile; December 21, advanced tank wagon and station gasoline one-half cent; December 26, reduced tank wagon gasoline one-half cent and station gasoline 1 cent; December 28, reduced tank wagon gasoline one-half cent and station gasoline 1 cent; December 29, reduced tank wagon and station gasoline one-half cent. December 17, advanced tank wagon gasoline 3 cents and station gasoline 4 cents in Montgomery; December 21, advanced tank wagon and station gasoline one-half cent; December 27, reduced tank wagon gasoline one-half cent and station gasoline 1 cent; December 28, reduced tank wagon gasoline one-half cent and station gasoline 1 cent; December 29, reduced tank wagon and station gasoline one-half cent further. December 31, reduced them one-half cent further. December 17, advanced tank wagon gasoline 4 cents and station gasoline 5 cents in Atlanta. December 17, advanced tank wagon gasoline 3 cents and station gasoline 4 cents in Augusta; December 27, reduced tank wagon gasoline one-half cent and station gasoline 1 cent. December 17, advanced tank wagon gasoline 2 cents and station gasoline 3 cents in Pensacola; December 21, advanced tank wagon and station gasoline 1 cent further. January 3, advanced tank wagon gasoline one-half cent, station gasoline 1 cent and tank wagon kerosene 1 cent in Lexington.

Standard Oil Co. of Indiana, January 5, reduced tank wagon gasoline two-tenths cent in Chicago. January 8, advanced station gasoline 1.8 cents in Chi-

(Continued on Page 32.)

CRUDE OIL PRICE CHANGES

Effective January 4, 1935, all Pennsylvania Grade crude oils were advanced 15 cents per barrel by the South Penn Oil Co., Tide Water Pipe Co. and other purchasers.

NEWS FOR SALES DEPARTMENTS

Colonial Beacon Introduces Revolving Service Station

The first revolving service station in this country had its preliminary opening last Thursday when the Esso Rotary Servicenter at 93 Lafayette Street, New York City, received an automobile on its giant turntable, whirled it around an island of dispensing equipment and in less than two minutes sent it out completely serviced with oil, gasoline, air and water. The Servicenter was officially opened the following Saturday.

Designed by the Colonial Beacon Oil Co., its principal features are that it requires less land than the old type of service station with equivalent facilities, it is economical to operate, speeds service, necessitates no awkward backing and turning, and keeps the motorist indoors.

The station is a building 41 feet wide by 75 feet long, of ultra-modern design. The facade was the work of Raymond Loewy, who executed an exterior design that is a radical departure from the conventional filling station or garage. As the motorist enters this building he drives onto an electrically operated turntable 37 feet in diameter. This turntable revolves around an island which contains an office, display rooms and dispensing equipment. The turntable's movements are controlled by attendants stationed on the island. As a car drives on the attendant presses a button and the car is whirled around to one of three positions next to pumps and other dispensing equipment. Three cars can be serviced on the table simultaneously.

For routine service, such as oil, gasoline, air and water, less than two minutes is required. If he desires service which requires any length of time, such as crankcase drain or complete body lubrication, he is taken to a so-called "half position" which permits him to drive to the rear of the station where this service is rendered.

"We can handle 100 automobiles an hour here," G. L. Rosebrook, company architect, explained. "This device permits us to do so with the utmost efficiency. This is the first such unit ever built in this country and another one will be opened within a week on Sixth Avenue near Sullivan Street."

Mr. Rosebrook said that Colonial Beacon and the Standard Oil Co. of New Jersey, of which it is an affiliate, plan to erect a number of revolving service stations in metropolitan sections.

The Rotary Servicenter, which has been granted the first patent ever given on a service station, resulted from a long study of present-day service stations and their operation in metropolitan centers. Increasing congestion, and the growing need for service to the motorist with a minimum of inconvenience and a maximum of speed led to the development of these novel stations which actually mark the first radical change in service station design since gasoline became a retail commodity.

CHAIN STORE TAX

Federal District Judge J. Foster Symes, of Denver, Colo., granted a temporary injunction on January 2 to nine oil companies operating filling stations in the State restraining the state treasurer from collecting a chain store tax imposed by the people at the November election through an initiated measure. The companies posted bonds to the amount of $106,000 to guarantee payment of the tax in the event the suit goes against them on permanent hearing. Judge Symes announced that the hearing on the temporary injunction will be held before three federal judges at a date to be determined later.

The nine companies joining in the application for an injunction operate 826 units in the State and the annual tax would be $215,569. These companies, amount of tax, and number of units are as follows: Continental Oil Co., $91,140.50 tax, 316 units; Texas Co., $46,065.50 tax, 167 units; Standard Oil Co. (Indiana), $36,449.50 tax, 135 units; Navy Gas & Supply Co., $6,399.50 tax, 35 units; Powerine Co., $13,611.50 tax, 59 units; White Eagle Oil Corp.-Socony-Vacuum Oil Co., $10,606.50 tax, 49 units; Robar Corp., $4,897 tax, 30 units; and Sommers-Home Oil Co., $6,399.50 tax, 35 units.

DOUBLE TAXATION

New York City's 2 per cent sales tax will be collected on gasoline taxes as well as on the retail price of the product, William Reid, city collector, has announced. "The city sales tax is imposed on the total selling price of gasoline including the federal and state excise taxes," a ruling states. "To illustrate, if the selling price of 5 gallons of gasoline is 65 cents and included thereon are the federal and state excise taxes, amounting to 20 cents, the total amount on which the tax is computed is 85 cents."

The ruling removes confusion previously existing among both dealers and motorists. The latter balked at paying the city sales tax on both the gasoline and the tax of 4 cents a gallon, a state tax of 3 cents a gallon and a federal tax of 1 cent.

RETAIL GASOLINE PRICE RISES DURING DECEMBER

Service station prices of gasoline continued to rise during December, bringing the January 1 average for 50 representative United States cities to 12.82 cents, exclusive of taxes. The first nine months of 1934 witnessed but slight fluctuation in the average retail price of gasoline. During the first part of this period the 1934 average was well above that of the year preceding, differing by more than 3 cents on June 1, when the 1933 price was the lowest in its recorded history.

The price trends for the two years reversed during June and July, and the 1934 figure fell below that of the year preceding for the first time in August. Late September, 1934, brought the beginning of price cutting and the price wars which resulted, dropped the price on November 1 to 11.92 cents, the year's low. Since then prices have shown a steady rise, but are not yet equal to the October 1 level. The price January 1, 1934, was 14.32 cents, 1.5 cents above that of January 1, 1935.

ALABAMA TAX REVENUES

A four-year report of the Alabama state tax commission issued at Montgomery reveals the gasoline tax as the greatest source of revenue. A total of $30,465,309 was collected from gasoline sales and $9,549,785 from motor car registration.

AMOS BALL » » »

CITIZENS of Marshalltown, Iowa 37 years ago doubtless did not recognize in the young general clerk in Standard Oil Company's (Indiana) office and warehouse a future general sales manager and member of the board of directors of that company, but they did not reckon on Amos Ball's industry in a company constructed on democratic patterns.

After three years apprenticeship at Marshalltown in office and sales work, the young man was transferred to Des Moines as stenographer to the manager, later becoming chief clerk. He was made manager's assistant in 1906 to handle sales promotion. In 1915 he was appointed assistant manager, and in January, 1922, with the consolidation of the Des Moines and Dubuque divisions, he was made manager. Six months later he was brought to Chicago as assistant general manager, and in October, 1926, Mr. Ball's long experience and high achievements brought him to appointment as general manager of the sales department and membership on the board of directors, which position he holds today.

Mr. Ball is well known among leaders of the industry and his counsel is often sought at meetings in which the industry's marketing problems are discussed.

Gasoline Consumption for October Drops Slightly

October daily average gasoline consumption in the United States decreased 498,000 gallons from the Septmeber total. This slight decline aided in keeping the average well above that of October, 1933. The 12.67 per cent difference between the 1933 and 1934 consumption shows an improved condition in the fall season. Consumption for the 10-month period ending October 31, 1934, is 7.11 per cent above that for the corresponding period in 1933.

The figures below represent the demand for gasoline by states as calculated from Bureau of Mines' monthly statistics:

	Sept., 1934 Gallons	Oct., 1934 Gallons
Alabama	13,583,000	14,379,000
Arizona	6,064,000	6,456,000
Arkansas	12,706,000	12,628,000
California	106,319,000	115,320,000
Colorado	19,075,000	15,829,000
Connecticut	24,890,000	23,574,000
Delaware	3,978,000	3,782,000
Dist. of Columbia	8,059,000	9,155,000
Florida	17,235,000	19,052,000
Georgia	20,170,000	21,978,000
Idaho	6,593,000	6,188,000
Illinois	92,040,000	99,538,000
Indiana	44,989,000	43,081,000
Iowa	37,000,000	36,457,000
Kansas	33,039,000	32,528,000
Kentucky	16,856,000	16,922,000
Louisiana	14,990,000	17,583,000
Maine	13,759,000	10,983,000
Maryland	17,976,000	19,800,000
Massachusetts	52,577,000	58,597,000
Michigan	76,101,000	67,078,000
Minnesota	40,915,000	43,057,000
Mississippi	11,217,000	12,322,000
Missouri	41,376,000	45,573,000
Montana	7,595,000	8,055,000
Nebraska	18,568,000	20,440,000
Nevada	2,303,000	2,199,000
New Hampshire	7,233,000	6,625,000
New Jersey	69,931,000	75,958,000
New Mexico	5,460,800	5,247,000
New York	144,928,000	139,833,000
Nort Charolina	24,325,000	27,709,000
North Dakota	9,394,000	10,972,000
Ohio	85,223,000	87,078,000
Oklahoma	27,229,000	26,161,000
Oregon	16,517,000	13,716,000
Pennsylvania	101,099,000	104,416,000
Rhode Island	9,686,000	10,322,000
South Carolina	10,986,000	11,981,000
South Dakota	10,223,000	10,327,000
Tennessee	19,393,000	19,558,000
Texas	78,911,000	82,846,000
Utah	6,931,000	5,858,000
Vermont	5,239,000	4,645,000
Virginia	22,283,000	24,979,000
Washington	23,183,000	22,379,000
West Virginia	13,857,000	14,350,000
Wisconsin	41,109,000	38,517,000
Wyoming	4,285,000	4,036,000
Total	1,496,524,000	1,530,957,000
Daily average	49,384,000	49,386,000
Change from previous year:		
Total change		+172,193,000
Percentage change in daily average		+12.67%

JOBBERS CONVENTION

Plans for the annual convention of Minnesota jobbers have been completed, and dealers from over the state will meet at the West Hotel in Minneapolis, January 17 and 18. The opening meeting of the convention will be held at 1:30 o'clock on Thursday, January 17. Registration will begin at 9 o'clock in the morning.

CANADIAN OIL IMPORTS

CHATHAM, Ontario, Jan. 5.—Official figures of the department of trade and commerce at Ottawa show that imports of petroleum, asphalt and their products into Canada in October were valued at $3,998,752, compared with $4,744,308 in September. Sources of October imports, with percentages, were: United States, 75.4; Peru, 14; Colombia, 5.8; Venezuela, 3.8; with nominal percentages from other countries.

Crude petroleum imports in October amounted to 110,637,902 gallons from the following countries: United States, 79,516,574; Peru, 15,392,314; Colombia, 8,061,984; Venezuela, 7,667,030.

Mid-Continent Runs for January Continue Downward

(Continued from Page 18)

EAST TEXAS

Company and location—	Daily capacity	Aver. daily runs January	Aver. daily runs December
Acme Refining Co., Gladewater	700	150	165
Adams Refining Co., Big Sandy	1,000	(*)	700
Alton Refining Co., Gladewater	1,500	(*)	(*)
Arrow Refining & Producing Co., Overton	5,000	1,450	5,500
Artex Refining Co., No. 1, Arp	1,600	(*)	(*)
Artex Refining Co., No. 2, Camps Switch	3,700	(*)	(*)
Atlantic & Gulf Refining Co., Kilgore	2,000	(*)	(*)
Atlas Refining Co., Gladewater	100	(*)	(*)
Aviation Refining Co., Kilgore	200	(*)	(*)
Bartlett Refining Co., Kilgore	200	(*)	(*)
Beacon Oil & Refining Co., Henderson	4,500	600	400
C. L. & W. Refiners Corp., Gladewater	1,200	270	165
Century Refining Co., Friars Switch	2,200	(*)	(*)
Chief Refining Co., Gladewater	1,500	(*)	350
Condor Refining Co., Kilgore	1,000	(*)	(*)
Consolidated Refining Co., Gladewater	1,500	800	(*)
Culver Refining Co., Gladewater	3,700	1,400	(*)
Danciger Refineries, Inc., Longview	10,000	(*)	(*)
East Texas Refining Co., No. 2, Longview	10,000	2,000	3,000
Friar Topping & Refining Co., Friars Switch	1,500	700	715
Gilliland Refining Co., Gladewater	3,500	670	670
Gilmer Refining Co., Gladewater	500	(*)	(*)
Godlin Refining Co., Gladewater	850	(*)	(*)
Goodson, Gentry, Carles Ref. Co., Gladewater	1,000	(*)	(*)
Gregg Refining Co., Gladewater	500	(*)	(*)
Hub Oil Refining Co., Reeds Switch	100	(*)	(*)
Humble Oil & Refining Co., Neches	5,000	450	600
Hunter & Knox Refining Co., Reeds Switch	100	(*)	(*)
Ideal Refining Co., No. 3 Gladewater	750	(*)	(*)
Illinois Refining Co., Kilgore	1,000	(*)	(*)
Jackson Refining Co., Gladewater	1,500	(*)	(*)
Jal Refining Co., Gladewater	1,500	(*)	(*)
Johnson Refining Co., No. 1, Kilgore	1,400	400	410
Kent Refining Co., Angus	4,000	(*)	(*)
Kilgore Reclamation Co., Kilgore	2,000	(*)	(*)
Kilgore Refining Co., Kilgore	3,000	(*)	(*)
Kiltex Refining Co., Kilgore	500	(*)	(*)
L. & G. Refining Co., Gladewater	1,100	(*)	(*)
Lake Refining Co., Gladewater	2,000	1,300	1,430
Lapren Refining Co., Kilgore	1,500	1,200	500
Linzie Refining Co., Gladewater	2,500	500	(*)
London Topping & Refining Co., Overton	400	(*)	(*)
Lone Star Refining Co., Gladewater	2,700	400	455
Magnolia Petroleum Co., Corsicana	5,000	3,000	3,000
Master Petroleum Co., Waco	1,000	400	(*)
McKain Refining Co., Gladewater	800	200	760
McMurray Refining Co., Arp	4,000	(*)	2,400
Minerva Refining Co., Minerva	2,000	(*)	(*)
Model Oil & Refining Co., Reeds Switch	1,400	(*)	(*)
Ocean Refining Co., Kilgore	3,000	(*)	(*)
Oil Refineries, Inc., Overton	4,000	(*)	(*)
Outdoor Refining Co., Kilgore	900	(*)	(*)
Overton Refining Co., Overton	3,000	(*)	(*)
Ozoso Refining Co., Friars Switch	10,000	(*)	(*)
Pacific Refining Co., Reeds Switch	1,800	(*)	(*)
Panama Refining Co., Kilgore	3,500	(*)	(*)
Pelican Refining Co., No. 1, Gladewater	900	(*)	(*)
Pennant Refining Co., Kilgore	1,300	(*)	430
Pentex Refining Co., Gladewater	500	(*)	(*)
Phoenix Refining Co., Dallas	5,000	(*)	(*)
Pope Refining Co., Gladewater	1,700	(*)	(*)
Producers Oil Refining Co., Reeds Switch	2,700	(*)	(*)
Rabbit Creek Refining Co., Kilgore	200	(*)	(*)
Recla Refining Co., Turnertown	200	(*)	(*)
Rig Topping & Refining Co., Kilgore	200	(*)	(*)
Roco Refining Co., Kilgore	2,400	(*)	530
Rusk Refining Co., Overton	3,000	(*)	(*)
Shoreline Refining Co., Kilgore	2,700	(*)	(*)
Simms Oil Co., West Dallas	4,000	(*)	(*)
Sinclair Refining Co., Camps Switch	5,000	1,500	2,710
Southport Refining Co., Kilgore	3,300	200	170
Staley, J. I., Refinery, Friars Switch	6,000	(*)	(*)
Supreme Refining Co., Gladewater	1,000	100	125
Texas Co., Dallas	16,000	10,000	10,000
Texas Oil Producers Co., Gladewater	2,000	1,200	1,515
Texas Refining Co., No. 1, Kilgore	1,200	(*)	(*)
Texas Refining Co., No. 2, Gladewater	2,300	(*)	(*)
Texas State Refining Co., No. 1, Kilgore	1,000	200	900
Triangle Refining Co., Kilgore	2,500	(*)	(*)
Trio Refining Corp., Arp	1,500	(*)	(*)
Tucon Refining Co., Gladewater	900	(*)	(*)
Twintex Refining Co., Kilgore	200	(*)	(*)
Tyler, Texas Producing & Refining Co., Tyler	15,000	(*)	(*)
Tyreco Refining Co., No. 1, Arp	2,500	600	1,600
Tyreco Refining Co., No. 2, Overton	3,000	2,000	2,480
Union Refining Co., Kilgore	3,000	(*)	1,650
Upshur Refining Co., Gladewater	1,000	(*)	(*)
Utah Refining Co., Kilgore	2,500	170	175
Wabash Refining Co., Gladewater	1,000	(*)	(*)
Wairip & Stevens Refining Co., Omega	1,000	(*)	(*)
Wolfe Refining Co., Kilgore	1,000	(*)	(*)
Total	228,800	31,890	42,515

*Shut down.

SOUTHWEST TEXAS

Company and location—	Daily capacity	Aver. daily runs January	Aver. daily runs December
Amsco Refining Co., Mirando City	2,000	1,000	900
Bee Oil & Refining Co., Pettus	1,000	500	500
Capital Refining Co., Luling	2,500	(*)	(*)
Chapa Refining Co., Laredo	100	50	50
Citizens Refining Co., Luling	200	60	60
Humble Oil & Refining Co., San Antonio	5,000	2,410	2,600
Magnolia Petroleum Co., Luling	7,000	5,175	5,175
Pettus Refining Co., Pettus	1,000	400	400
Phoenix Refining Co., San Antonio	500	400	400
Pioneer Oil & Refining Co., Somerset	2,000	800	800
Price Refining Co., San Antonio	500	(*)	(*)
Rado Refining & Producing Co., McAllen	500	200	200
Texas Co., San Antonio	3,000	3,000	3,000
Texas Petroleum Products Co., Somerset	1,500	250	250
Total	26,800	14,245	14,335

*Shut down.

ARKANSAS

Company and location—	Daily capacity	Aver. daily runs January	Aver. daily runs December
Berry Asphalt Co., Waterloo	2,000	1,100	900
Henry E. Cross Co., Smackover	4,000	3,000	3,000
Lion Oil Refining Co., El Dorado	12,000	6,500	6,500
Macmillan Petroleum Products Co., Norphlet	2,300	2,000	2,000
Ouachita Valley Refining Co., El Dorado	2,500	(*)	(*)
Root Refining Co., El Dorado	10,000	5,300	5,300
Simms Oil Co., Smackover	3,000	(*)	(*)
Stephens Refining Co., Stephens	750	250	250
Total	36,550	18,150	17,950

*Shut down.

NORTH CENTRAL TEXAS

Company and location—	Daily capacity	Aver. daily runs January	Aver. daily runs December
All State Refining Co., Thrall	2,300	150	150
Archer Refining Co., Megargel	1,000	300	85
Atlantic, Pacific & Gulf Refining Co., Wichita Falls	5,000	100	100
Baird Refining Co., Baird	1,400	800	800
Canyon Oil & Gas Co., Inc., The, Cisco	500	(*)	(*)
Continental Oil Co., Wichita Falls	6,000	4,000	3,000
Empire Oil & Refining Co., Gainesville	5,000	(*)	130
Exchange Petroleum Corp., Albany	500	200	300
Falls Refining Co., Wichita Falls	2,000	300	300
Gratex Refining & Fuel Co., Graham	500	200	300
Gulf Refining Co., Fort Worth	10,000	4,000	4,300
Gulf Refining Co., Sweetwater	5,000	4,350	4,000
Haskell Oil Refining Co., Breckenridge	200	(*)	(*)
Hill Refining Co., Ballinger	80	80	80
Jacksboro Refining Co., Jacksboro	50	50	50
LaSalle Petroleum Co., Burkburnett	3,500	130	130
Magnolia Petroleum Co., Fort Worth, No. 1	12,000	4,370	4,370
Magnolia Petroleum Co., Fort Worth, No. 2	6,000	(*)	(*)
Marathon Oil Co., Fort Worth	5,000	3,000	3,000
Margold Refining Co., West Olney	400	200	200
Moutray Refining Co., Hawley	600	250	225
Meunster Refining Co., Meunster	300	150	150
New Deal Refining Co., Abilene	300	(*)	(*)
Nolting Refining Co., Sweetwater	1,000	(*)	(*)
Olney Oil & Refining Co., North Olney	3,000	1,500	1,500
Omega Refining Co., Brownwood	200	(*)	(*)
Panhandle Refining Co., Wichita Falls	5,000	2,000	2,000
Paragon Refining Co., Leuders	400	125	150
Pentex Refining Co., Echo	400	(*)	(*)
Petroleum Oil Interests, Inc., Brownwood	1,000	350	350
Pilot Point Refining Co., Pilot Point	500	100	100
Sinclair Refining Co., Fort Worth	5,000	1,800	1,800
Southtex Refining Co., Trent	250	(*)	(*)
Southland Refining Co., Olney	1,000	(*)	(*)
Starlight Refining Co., Inc., Ballinger	500	300	300
Star Refining & Producing Co., Fort Worth	1,200	500	470
Superior Refining Co., Tiffin	500	(*)	(*)
Taylor Refining Co., Taylor	6,000	800	800
Taxman Refining Co., Wichita Falls	3,500	(*)	700
Texas Pacific Coal & Oil Co., Fort Worth	3,000	3,000	2,900
Texas Pacific Coal & Oil Co., Caddo	1,000	600	700
Tucker Refining Co., Wichita Falls	200	130	130
Waggoner Refining Co., Electra	6,000	2,725	2,725
Watt Refining Co., Brownwood	200	200	200
Total	107,780	36,710	35,215

*Shut down.

Many Factors Operating to Strengthen Market

(Continued from Page 16.)

Texas gasoline ceases to supply this competition third grade gasolines will probably be discontinued at a number of points in the Middle West also.

Motor Car Design

Without attempting a discussion of the actual car design, it should be mentioned here that motor manufacturers have shown a fuller appreciation of the need to avoid vapor locking in the design of the 1935 cars. The problem is being studied further at the Bureau of Standards laboratories in Washington and is receiving the support of important companies in the automotive industry as well as the refining and natural gasoline industries. Comments made thus far indicate that it is not beyond reason to expect a more liberal set of specifications to be established for government motor fuels within the near future in which the vapor pressure limits would be raised 2 or more pounds. Also, the fact that increased motor fuel volatility helps to suppress knocking has caused automotive engineers to be more than willing to cooperate in the problem.

Effect of Cracking

The principal competitor of natural gasoline has been the refinery vapor recovery gasolines. As these units were installed, the need for natural diminished in proportion and the strongest blow fell about two years ago when refiners turned to the practice of reforming straightrun gasoline to improve the antiknock value of their production. Fortunately for the natural gasoline manufacturer, extreme reforming did not last long and gave way to Ethyl fluid when prices on the latter were reduced by the Ethyl Gasoline Corp. and when the Q brand of regular grade gasoline was introduced.

The greater lead responsiveness of natural gasoline also favored the use of natural in building up octane values.

But these factors are in the past and while they will continue to operate they would not of themselves tend to increase the use of natural in 1935 over what it was in 1934. It is true, however, that each year takes its toll of cracking equipment in the form of corrosion and wear and it is not possible for a refiner to operate his cracking unit under the same temperature and pressure conditions year after year without major replacements.

Prices on refined products have not permitted refiners to make these replacements generally for the past four years and as a result the pressures of many units throughout the country have had to be reduced to insure safety. When operating conditions are moderated there is an accompanying falling off in total gasoline yield and especially in the volume of light fractions. During 1935 some replacement of worn equipment is expected but the wear over the past four years probably exceeds the new work that could be completed this year. This, of course, is not applicable to all refineries and some of the larger units still claim to have excess volatility but a substantial portion of this excess volatility is in the form of propane and butane and is not suitable to build up the middle and most important portion of the motor fuel distillation curve.

Pipe Line Deliveries

In several instances where the major integrated companies have chosen to absorb larger quantities of natural gasoline to build up volatility in their motor fuels, they have attacked the problem by contracting to take the entire production of plants along their crude lines and are transporting the natural with the crude to their refineries. The Carter, Sinclair, Shell, Phillips, Gulf and Empire companies have handled natural through their crude lines and are expected to continue the practice. In fact, some of these companies are now actively soliciting connections in the same manner pipe lines have sought crude connections. Two very important refining companies have also gone to the trouble of making complete surveys of the natural gasoline manufacturing facilities in the Mid-Continent.

OPEN HEARINGS UPHELD

AUSTIN, Tex., Jan. 7.—District Judge W. F. Robertson has dissolved a temporary injunction restraining the Texas Railroad Commission from holding public hearings on applications for permits to move oil.

He ruled the commission's order did not require sessions of the tender board to be open.

F. W. Fischer of Tyler, attorney for the Panama Refining Co., said he would amend his petition and specifically allege the tender order required public hearings.

NEWS FOR PETROLEUM REFINERS

Two More Refineries to Be Built in Michigan

MUSKEGON, Mich., Jan. 7.—Plans for construction of two new independent refineries at Bay City, Mich., one to contain a cracking plant and the other a small skimming plant, were announced this week.

Construction of a 350-bbl. still for the Bay Refinery Co. has been started on the Marston farm in Bangor Township near Bay City. The crude supply is expected to come from the Ogemaw County Pool where W. J. Sovereign, of Bay City, one of the directors, has production. Gasoline, kerosene, naphthas, distillates and other products will be manufactured. A larger plant, including a cracking unit, the second to be announced in Michigan within the past two weeks, will be erected near Bay City by Del Fortney and a group of other operators and interest holders in Clare, Saginaw, Bay City and Kalamazoo.

Seven acres, formerly the site of a DuPont Powder Co. plant during the World War, has been purchased. Work of clearing the site will be started shortly. The plant is expected to be completed in time to begin marketing gasoline and other products in the spring.

The crude supply is expected to be obtained from the Strange and Fortney Oil Co. and other independent producers in the Porter and other central Michigan fields. The new plant will be located at Salsburg, a suburb of Bay City, on spurs of the Michigan Central and Grand Trunk Western Railroads.

FILTROL APPOINTED AGENT

The Filtrol Co. of California, under arrangements recently completed, becomes licensing agent for Gray Processes Corp., of Newark, N. J. Three processes, each involving the use of fine clay, will be dealt with by Filtrol as licensor. Included are the Stratford Process, in wide commercial use by Imperial Oil Co. and its subsidiaries; the Osterstrom Vapor Phase Process, developed by the Pure Oil Co., and the Hill-Baylis Process now under development.

The new arrangement does not apply to the Gray Process or to the Osterstrom Liquid Phase Clay Treating Process, and represented as heretofore by Gray's present agents, Alco Products, Inc., and the M. W. Kellogg Co.

HOLD CRACKING CONFERENCE

The committee on research, a division of the Cracking Development Conference, held its midwinter meeting at Whiting, Ind. In attendance were research technologists of the participating companies, namely, the Standard Oil Company (Indiana), the Texas Co., Standard Oil Co. of New Jersey, Gasoline Products Co., Inc., and the M. W. Kellogg Co. John T. Ward, research director of the M. W. Kellogg Co., was chairman of the meetings which occupied the two-day session. Some 20 papers were presented, relating to substantially all phases of pyrolytic cracking.

DUBBS ENGINEER IN MICHIGAN

F. J. Mack, of Chicago, Universal Oil Products Co., engineer, arrived in Muskegon, Mich., last week to start making plans for the new $200,000 Dubbs cracking unit to be erected during the next four months by the Naph-Sol Refining Co.

Mr. Mack will spend several days at the refinery site. Plans are expected to be completed within 15 or 20 days after which foundation work will be started if weather conditions permit.

NEW VAPOR RECOVERY PLANTS

The Republic Oil Refining Co. is installing a 2,000,000-foot vapor recovery and stabilizer system of the newest Burrell-Mase type at its refinery near Texas City, Tex. It will process vapors from the normal skimming and cracking operations including the stabilization of pressure distillate, the nature of the unit being unique in that absorption and stabilization is carried out in the same tower.

A unit of similar design is being built for the Wilcox Oil & Gas Co. at its refinery in Bristow, Okla., the latter plant being designed to handle approximately 1,000,000 feet of vapors daily.

Effect Compromise on Louisiana Refinery Tax

Effecting what Senator Huey Long of Louisiana calls a compromise, the Standard Oil Co. of Louisiana has agreed to pay the 5-cent per barrel processing tax placed on each barrel of crude run after January 8 but for a period of 90 days thereafter will receive a rebate of 4 cents per barrel after which time the 5-cent tax will be paid only on crude processed which is not produced within the State's borders plus 1-cent tax on the crude processed and produced within the State.

While the order and the compromise affected all refineries the Standard took the initiative to oppose it since the law placed that company at a decided disadvantage in competing with refineries located in other states and selling their products in distant markets.

Rather than to attempt to compete with this tax handicap, the Standard issued notices to its employes that the plant would be closed down. This would have meant the laying off of approximately 1,000 men. It is not certain whether the company will attempt to get additional Louisiana oil to make up the 20 per cent out-of-state oil it now processes or cut its operations proportionally. The latter is suggested in as much as the company did not obligate itself to retain all of its employes. Abandonment of the plant is also suggested.

SUPERINTENDENTS CHANGED

The Humble Oil & Refining Co., January 1, transferred G. L. Farned, former superintendent of the Ingleside, Tex., refinery to the same position in the plant at Baytown. Succeeding F. N. Read who was moved to Ingleside, Mr. Farned will operate the Baytown refinery under the supervision of R. E. Powell, general manager.

S. A. E. Dinner Marks High Spot of Show Week

Several representatives of the oil industry were among those attending the Thirtieth Anniversary Dinner of the Society of Automotive Engineers, held January 7 in the grand ballroom of the Hotel Commodore, New York City. This year the gathering assumed double importance, because of the occasion it celebrated, and the fact that it was virtually the only general social gathering planned for the whole of show week.

Born 30 years ago, the S. A. E. demonstrated the vigor of its youth by staging a birthday party at which the speakers were William B. Stout, celebrated designer of airplanes and rail cars, and Col. Roscoe Turner, holder of many records in the air and recent successful contestant in the England-Australia race. D. G. Roos, president of the Society, introduced the speakers at the dinner and presented to the audience scores of celebrities in the automotive world who attended.

STABILIZATION MEETING

Marketing executives met in Chicago January 3 at the calling of a meeting of the stabilization committee by Chairman C. E. Arnott, president of the Socony-Vacuum Corp., as another step in the program of bringing about a more equitable gasoline retail price structure. The work of the group has been decidedly constructive and the January 8 advances in the posted prices in Chicago, St. Louis, Minneapolis and St. Paul can be traced to the committee's work.

B. B. REEVE APPOINTED

The appointment of Dr. Bryce B. Reeve, Whiting, Ind., as director of the medical department of Standard Oil Co. to succeed the late Dr. Frank R. Morton, was announced today by Edward G. Seubert, president of the company.

Doctor Reeve joined the Standard organization as assistant surgeon of the refinery hospital at Whiting on April 23, 1923, and became chief surgeon there a few months later. He has since served in that capacity and as assistant to Doctor Morton.

DENIES PURCHASE

Col. T. H. Barton, chairman of the board of directors of the Lion Oil & Refining Co. of Shreveport, La., denies the published statement to the effect that he had purchased the plants of the Overton Refining Co. and the Kilgore Refining Co. and will operate these facilities.

Humble Operates New Type Streamlined Trailer

This new streamlined tank trailer, fitted with special glass-enclosed compartments and powered by a 131½-inch Ford V-8 truck, is being operated out of Houston, Tex., by the Humble Oil & Refining Co. Special features of the equipment include underslung cabinets with glass doors and chromium plated display compartments, a streamline tunnel on top of the tank, chromium plated hand rails and fittings, and cabinets on the sides containing faucets and hose, as well as a similar cabinet on the sloping rear panel. The 1,045-gallon tank body is divided into five compartments for gasoline and lub oil.

NEW EAST TEXAS REFINERY

The Premier Oil & Refining Co. has been formed by Sylvester Dayson, president; J. R. Parten, Houston, chairman of board of directors; Sam W. Ross, Kilgore, vice president; S. R. Stacy of the Delta Drilling Co., Longview, vice president, and Richard Blalock, Marshall, secretary and treasurer.

Ground has been broken in central Gregg County for a 2,500-bbl. cracking plant that will cost in the neighborhood of $250,000. The plant is expected to be completed and in operation around May 1, 1935.

The Woodley Petroleum Co., Delta Drilling Co. and several of the men interested in the company, have production in the East Texas Field.

Market for Premium Ethyl Shows Steady Improvement

The tide for premium gasoline has turned, and the outlook for 1935 is "good," according to J. C. Taylor, sales manager of the Ethyl Gasoline Corp., owned jointly by General Motors Corp. and the Standard Oil Co. of New Jersey.

"Since the late summer months Ethyl sales have been showing an increase," says Mr. Taylor in "The Ethyl News," house organ of the Ethyl Corp. "Recently several of our major licensees have voluntarily improved their Ethyl gasolines over our minimum standard, and are now making determined efforts, with intensive sales and advertising drives, to capture the premium gasoline business in their respective markets.

"This is a clear indication that the oil industry is reawakening to the value of the premium market. The use of lead in regular gasoline has progressively increased since a year and a half ago when the product was introduced, and as a result it is estimated that over 65 per cent of the gasoline distributed in the United States now contains lead.

"However, the background of our business is still Ethyl, and as we look forward to 1935, we shall continue to use as a foundation the million car owners who now use Ethyl. This number will grow as general business conditions improve and as more new cars are sold."

Pointing out that the Ethyl Gasoline Corp. "has been responsible for vast improvements in the automotive and fuel worlds" since it was organized 11 years ago following the discovery of Ethyl fluid by Thomas Midgley, the organ declares:

"Not a single member of our organization has lost his or her job because of the depression."

MIST EXTRACTOR PATENT

Meinhard H. Kotzebue, vice president of the Tulsa Boiler & Machinery Co., was granted patent No. 1,983,762 on December 11 covering the more complete separation of liquid and gases during fractionation. The patent claims are based upon the benefits obtained from passing the vapors upward through risers so fitted as to cause these vapors to swirl. This action within the tower together with other features of the design permit operating a column so equipped at about 20 per cent higher capacity and the relux may be cut as much as 50 per cent of normal.

JERSEY MISSION SHARES

The Standard Oil Co. of New Jersey has declared a dividend of one share of capital stock of the Mission Corp. for every 25 shares of its own capital stock held. The dividend is payable on March 15 to stock of record of February 15.

NEWS FROM FOREIGN LANDS

POLAND

Galicyjskie Towardzystwo Naftowe "Galicja" S.A., which operates one of the largest refineries in Poland at Drohobicz, is refining new products for its marketing division. The new products include agents for the compounding of greases, waxes for technical and cosmetic purposes, deodorants for gases, alcohol denaturants, demulsifying agents, inhibitors for separation of naphthalin and gum in gas mains and synthetic fatty acids.

"Galicja" is one of the oldest petroleum firms in Poland, the original operation dating back to 1863 when a plant was built for the treatment of ozocerite obtained in Boryslaw. The firm today consists of the main establishment in Poland and of subsidiaries in Austria, Czechoslovakia, Danzig, etc. A year ago the "Galicja" joined forced with the large Polish company, the "Limanowa," and it now carries on the refining of the latter's crude oil production at the Drohobicz refinery. In consequence of this arrangement the "Limanowa" refining plant in Limanowa, West Poland, was shut down.

Part of the research and control laboratory of Galicyjskie Towardzystwo Naftowe "Galicja" S. A. located at Drohobicz, Poland refinery.

The company engages in the production of natural gas and crude oil, the refining and treatment of these and the marketing of the products obtained. The production of petroleum is carried on over practically all the Polish oil fields and comprises both the paraffin-base and the wax-free oils.

Natural gasoline is produced in three plants operating with the activated-carbon process, and the residue gas is then utilized as a fuel in the refinery. At present the gas production of the "Galicja" is about 50 cubic meters a minute.

In addition to the large refinery in Drohobicz, the "Galicja" has a small one in Mucacevo, Czechoslovakia, which supplies Slovakia with gasoline, kerosene and lubricating oils.

The Drohobicz refinery refines about 60,000 bbls. of crude per month, this figure comprising the operations up to the final high-grade finished products, lubricating oils being obtained even from the heaviest distillation residues.

The distilling operations involve the treatment of 80 per cent of the paraffin-base Boryslaw petroleum and 20 per cent of the wax-free article. The product is subjected to continuous distillation in a battery of stills producing gasoline, kerosene, heavy and light paraffin oil and distillation residues containing 20 per cent of asphalt and paraffin products. This residue is heated in batch-operating stills, and further paraffin oil is distilled off. The resulting coke is utilized in the metallurgical and electrical industries.

Refinery Equipment

The following is an enumeration of the most important of the installations at the Drohobicz refinery: Batteries of continuous shell stills for crude petroleum; lubricating oils; vacuum units for wax-free crudes; high-vacuum outfit (2 mm. merc.) for lubricating and cylinder oils; gasoline redistillation and rectification; Cross cracking unit; rerun unit for cracking gasoline; treating unit for gasoline, cracking gasoline, kerosene, paraffin and lubricating oils; paraffin plant for the production of about 500 metric tons of finished paraffin a month.

Other equipment for the production of special products includes a wax candle factory; asphalt factory for the production of about 500 metric tons of asphalt a month; gasoline plant for removal of gasoline from natural gas. The refinery has a power station, comprising modern boiler house, water-pump station, water-purification plant and electric plant, with an installed output of 5,000 kilowatts; machine and electrical shops, barrel factory and tank repair plant; central operating and scientific laboratory.

The following standard products are put out by the refinery: Various grades of gasoline; kerosene; Diesel engine fuels; machine lubricating oils of every class; motor oils for auto vehicles and airplanes, winter and summer grade; steam cylinder lubricants for saturated and superheated steam; cake paraffin, from softest grade up to a congelation point of 62/64° C.; road asphalts, as well as asphalts for other purposes, from softest to hardest grades.

The following items are the most important of the special products: Transformer oils, steam turbine lubricants, white oils for medicinal use, druggists' vaselin, drilling oils, tanning oils, gear oils and greases; and insulating materials such as lacquers, cements and putties prepared from asphalt; floor cements, cable oils, cable impregnators.

GREAT BRITAIN

Imports of crude oil and refinery products into the United Kingdom showed a large increase in November over October and November, 1933. The imports for November totaled 244,890,000 imperial gallons, a gain of 30 per cent over November, 1933. Due to this large gain in November the accumulative total for first 11 months of 1934 shows a larger gain over the same period in 1933 than did the 10-month figures.

The gain for the 11 months was 284,738,000 imperial gallons, or 12.7 per cent over the same period in 1933. Since United Kingdom is dependent almost entirely on outside sources of supply for crude oil and refinery products, the imports are an accurate indication of consumption. With the December figures not yet available the 11-month data point to one of the largest gains in consumption in the history of the United Kingdom with a new yearly peak.

The following table gives the imports for the first 11 months of 1934 and 1933 (data in imperial gallons:)

	1934	1933
Crude oil	448,090,000	364,164,000
Kerosene	200,513,000	163,009,000
Gasoline	1,039,708,000	998,400,000
Lubricating oil	96,023,000	95,371,000
Gas oil	123,603,000	99,312,000
Fuel oil	602,983,000	510,604,000
Misc. oils	19,429,000	14,751,000
Total	2,530,349,000	2,245,611,000

BELGIUM

The Belgian government has announced some changes in duties applying to crude oil and refinery products. The duties now effective are as follows: (Francs per hectoliter) (26.42 gallons).

Product—	New duty
Crude oil for refined industrial uses	free
Crude oil for other uses	7.0
Petroleum ethers and spirit intended for industrially treating raw mat'ls	*34.5
Petrol for cleaning and white spirit used in the manufacture of industrial products	*69.0
Petrol for other purposes	137.5
Refined or purified oils, medium	112.5
Heavy oils (fuel, gas oils, e.c.)	10.0
Paraffine wax, vaseline	20.0

*Includes 15 per cent surtax.

RUMANIA

"Carmen Petrol" Societate Anonima Romana Pentru Mine Si Petrol has completed an improvement and enlargement program at its Targoviste, Rumania, refinery. New towers have been installed and other improvements made at the refinery. The crude oil capacity has been increased from 120,000 to 150,000 tons annually.

IRELAND

The Irish Free State minister has announced that the tax on petrol (motor fuel) refined in Ireland will be 6d per imperial gallon. This will give the product refined in Ireland a 2d per gallon advantage over the imported product.

The Cork Harbor Oil Wharves, Ltd., subsidiary of the Oil Wharves, Ltd., is building a small plant on Haulbowline, off the mainland. The plant will have a capacity of 600 bbls. of crude oil daily.

ECUADOR

The Anglo-Ecuadorian Oilfields, Ltd., is preparing to drill some deep tests in Ecuador according to H. C. R. Williamson, chairman of the board. New drilling equipment has been ordered and it is believed that the deep tests will result in production in new horizons.

In his annual report to stockholders, Mr. Williamson explains that the company has been able to maintain a production of 16,000 tons monthly or a little less than 4,000 bbls. daily. In regard to producing operations in Ecuador, the annual statement to stockholders explains "The decline curve of the deep wells was abnormally small, thus enabling output to be maintained while permitting coring and testing of deep wells and exploratory work on shallow areas to be carried on simultaneously. While new shallow areas of much promise were discovered nevertheless experience tends to show that wells in the proven areas can be closely interspaced without greatly affecting the output of existing wells. As regards the deeper sands, new equipment now on order should enable much knowledge to be gained and deeper horizons to be reached."

TURKEY

Indications of petroleum deposits are reported to have been found near Midyat in the Mardin Vilayet, by Turkish and foreign experts, who have been carrying out geological investigations for the Turkish Ministry of Public Economy, according to The Naft, Anglo-Persian Oil Co., Ltd., publication.

View of the Boryslaw-Kraxnica Field in Poland operated by "Galicja".

"Feel that Side Change SHAPE as the V-BELT BENDS"

That's Why THE Concave Side Cuts Your Transmission Costs

Any V-belt *changes shape* when it bends. The top is under tension and *narrows.* The bottom, under compression, *widens.* Figure 1 (right) shows the resulting shape-change in a straight-sided belt. Note the out-bulge of the sides. Now look at figure 2. The same change of shape merely *straightens* the concave side, producing a contour that *precisely fits* the sheave groove.

Two big economies result: (1) No out-bulge at the side means uniform wear – *longer life!* (2) Full side-wall grip on the pulley holds heavier loads without slippage – a big increase in drive efficiency.

The Gates Vulco-Rope Drive is the *only* V-belt built with the patented concave side.

WHAT HAPPENS *When a* V-Belt **BENDS**

Fig. 1. *Straight-Sided Belt*

Fig. 2. *Belt with Patented* CONCAVE *Side*

THE GATES RUBBER CO.—*Factory Branches:*

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Engineering Offices and Stocks in All Large Industrial Centers

GATES VULCO ROPE DRIVES

Late Fields

KANSAS

Dickey Oil Co.'s No. 1 Tull, NE NE SW Section 13-19-3w, McPherson County, Kansas, flowed 750 bbls. of oil and 28,000,000 feet of gas from 2,970-3,006 feet.

Phillips Petroleum Co.'s No. 2 Link, NW NW SW Section 21-19-9w, Rice County, had Siliceous lime at 3,212-35 feet. It made 64 bbls. of oil the first day and 9 bbls. the second day after an acid treatment. No. 3 on the lease, SE NW SW Section 21, had Siliceous lime at 3,201-20 feet and produced 51 bbls. in seven hours.

Texas Co.'s No. 2 Grove, NE NW NE Section 29-29-9w, had Siliceous lime at 3,197-3,208 feet, total depth. It pumped 660 bbls. in 16½ hours.

Imo Oil & Gas Co. completed No. 1 Sperling, SE NE NE Section 23-22-2w, Harvey County. It is good for 240 bbls. a day in Hunton lime at 3,279-3,339 feet. It was shut in awaiting pipe line connection. It is a wildcat discovery.

E. B. Shawver's No. 2 Frankum, SE NE NE Section 32-31-1w, in Sumner County, found Mississippi lime at 3,652 feet and pay at 3,664-74 feet, total depth 3,690 feet. It flowed 10 bbls. an hour by heads. It was acidized and later produced 325 bbls. in 24 hours and then 71 bbls. in six hours. It was reacidized and made 90 bbls. in two hours and 415 bbls. in a 48-hour potential test.

Murphy and others' No. 1, C NW NE NE Section 7-35-3, Cowley County, penetrated Bartlesville sand at 3,440-3,504 feet. The well flowed 121 bbls. in six hours and then 217 bbls. in 41 hours. The oil graded about 42 degrees. It was to be given a small shot, and if it helped the whole section was to be shot.

The second well has been drilled in the new pool recently opened in Ellsworth County by the Twin Drilling Co. and others. Atlantic Oil Producing Co.'s No. 1 Rolfs, C SE NE SE Section 14-17-9w, an offset to the discovery well, found Siliceous lime at 3,193-98 feet. A light portable pumping outfit was rigged up with the working barrel 2,000 feet from the top of the hole and the well pumped 500 bbls. in 13 hours. A heavy pump will be installed to give the well a complete test of its potentiality.

OKLAHOMA

In the Fitts Pool, Pontotoc County, Blackstock and others' No. 4 Hardin, C SE SE NW Section 30-2-7, produced 1,653 bbls. in 3 hours, and gas at the rate of 7,000,000 feet from sand at 4,055-4,270 feet.

Lynch and others' wildcat, in SW NE SW Section 1-1-7, Pontotoc County, flowed 68 bbls. in 24 hours from Hunton lime at 3,883 feet, Sylvan at 4,109 feet and total depth 4,178 feet.

Stanolind Oil & Gas Co.'s No. 4, C SE NW SW Section 30-2-7, had the Gilcrease series at 1,180 to 1,468 feet and a 50,000,000-foot gas production, with a spray of water.

The 52 wells in the Lucien Pool in Noble County will be given potential tests, which have already begun. The wells will be permitted to flow 12 hours and the result will be multiplied by 1.8 to give a 24-hour potential. It will take 11 days to complete the tests.

RETAIL PRICE CHANGES

(Continued from Page 26.)

cago; reduced tank wagon gasoline 0.7 cent and advanced station gasoline 3.6 cents in Minneapolis.

Socony-Vacuum Oil Co., Inc., December 22, advanced tank wagon kerosene one-half cent in Boston. January 8, advanced tank wagon gasoline 4 cents and station gasoline 5.5 cents in Buffalo; advanced tank wagon 2 cents and station gasoline 3.5 cents in Rochester.

Tank wagon and station gasoline were advanced 1 cent in Shreveport, due to imposition of a 1-cent parish tax, effective January 1.

Atlantic Refining Co., December 31, reduced tank wagon and station gasoline 1 cent in Erie. December 22, advanced tank wagon kerosene 1 cent in Springfield, 1.5 cents in New Haven and one-half cent in Providence. December 27, advanced tank wagon kerosene 1 cent in Hartford. January 1, advanced tank wagon kerosene one-half cent in Worcester.

Imperial Oil Lmt., January 3, advanced tank wagon gasoline 1 cent and station gasoline 1.5 cents in Hamilton and Toronto.

Magnolia Petroleum Co., January 3, reduced tank wagon and station gasoline 3 cents in Dallas and Fort Worth. January 1, advanced tank wagon kerosene 1 cent in Fort Smith. January 3, reduced tank wagon kerosene 1.5 cents in Houston.

Impulse to Tear Off Lid Dulled Overnight

(Continued from Page 13.)

October, 1934, to a new low of 714 cars for the week ending January 3. One feature of the week's report was the fact that no crude oil or other products were shipped out as "topped crude." Hundreds of thousands of barrels of crude and other products have been shipped out previously under this label, but the Federal Tender Board and Railroad Commission, the latter drawing on its new tender order, put a stop to the wrongful billing of oil for shipment.

Shipments of Products

Shipments of refined products from the field for the week ending January 3 were:

	Cars	Gallons
Gasoline	309	2,497,285
Fuel oil	130	1,242,708
Residuum	33	304,105
Casinghead gasoline	141	1,198,458
Kerosene	22	174,325
Gas oil	14	113,525
Distillate	51	416,120
Naphtha	12	97,172
Crude oil	2	20,765
Total cars	714	

Of cars shipped, 85 went out under Federal Tender orders and 224 were accompanied by state tenders. No shipments were made of untendered products during the week. This was another feature of this week's shipment reports, as a considerable number of cars of refined products have been going out of the field without tenders.

The Taylor Refining Co., one of the largest refiners in the field, which was sold recently to another independent refiner, has obtained a temporary injunction preventing the Railroad Commission from interfering with the movement of products refined from 40,000 bbls. of oil from the field. Tenders on these products were previously requested but refused by the commission, and the company took the matter to court. Counsel for the company stated the products were manufactured from crude tops on which the plant operated and which were received prior to new refined products tender order becoming effective. Hearing on making the injunction permanent was set for January 14. A permanent injunction will release several thousands of barrels of such refined products, being held in storage in the field. One refiner alone has 85,000 bbls. of cracked gasoline and 40,000 bbls. of straightrun gasoline in stock, none of which can be moved by federal tender, and which will have to be sold intrastate.

There were only 20 refineries operating in the field during the week. Runs to these plants averaged 21,600 bbls. per day, another small decrease in runs. Of the plants now operating only nine were able to get both state and federal tenders on refined products offered for shipment.

SANTROCK-DUFFIELD WEDDING

H. B. Duffield and Mrs. Nellie B. Santrock were united in marriage on Monday, January 1, at the home of the bridegroom's sister, Mrs. R. A. Griffith, in Tulsa. Mr. and Mrs. Duffield will reside at 1623 South Utica Avenue in Tulsa. Mr. Duffield represents the Youngstown Sheet & Tube Co. in the Tulsa territory.

Texas and Washington Opinions on Decision

(Continued from Page 8.)

hot oil or its products," Mr. Allred announced.

The Texas legislature will meet tomorrow, and if additional state enactments are required the subjects will be taken up immediately. It was pointed out the state tender board, and the new provisions of the state law which went into effect December 25 are unaffected by the federal court decision.

STATE LAW IS AMPLE

AUSTIN, Tex., Jan. 7.—F. W. Fischer of Tyler, counsel for the Panama Refining Co., today termed the decision of the supreme court of the United States in an NRA oil code case "a great victory to the people and to all business."

"As to the oil situation," he said, "no one need have any fear that the country will be flooded with excess oil, for the reason that under (state) Senate Bill 21, effective December 25, the Texas Railroad Commission now has ample power to prevent the movement of illegal oil or any refined products from the place of its origin to an interstate carrier. Therefore, there is nothing to the state's claim that lacking control over interstate commerce it is unable to prevent the shipment in interstate commerce of excess oil or products.

"It has ample power to prevent the illegal commodity from reaching the interstate carrier."

PUSH INTERSTATE COMPACT

PONCA CITY, Okla., Jan. 7.—Governor-elect E. W. Marland said tonight in view of the supreme court decision today, Oklahoma would make definite steps to help overcome any flooding of the market by introduction in the legislature tomorrow of a bill for interstate oil compacts.

The proposed bill, which will be high on the legislative calendar, was approved 5 to 3 last week at the eight-state oil conference here and provides a clause similar to the Section 9(c) of the NRA. It also proposes a federal-state pact finding board to fix oil allocations after the required number of states sign the contracts. The compacts must first be provided for by Congress and the legislatures of the oil states.

Marland said the supreme court decision was not unexpected and "it now is more necessary than ever to get the interstate compact program in motion. At the last conference held here it was voted to ask Congress to pass an act with the same intent of Section 9(c), but one that will be constitutional. We believe the clause as written in the proposed bill will stand the test of the courts."

LANDON'S OPINION

TOPEKA, Kans., Jan. 7.—Gov. Alf M. Landon of Kansas, in commenting on the supreme court decision in Washington today holding invalid the clause of the National Industrial Recovery Act under which the government is attempting to curtail oil production, said:

"It is absolutely imperative in order to prevent a collapse of the purchasing power of the industry throughout the southwest that Congress pass a constitutional bill giving a federal agency authority to fix a fair allocation between states."

TEXAS CAN STOP SHIPMENTS

AUSTIN, Tex., Jan. 8.—C. V. Terrell, of the Railroad Commission of Texas, in commenting on the Supreme Court decision involving Section 9(c) of the National Recovery Act stated the commission has full power and authority to prevent shipments of hot oil or products therefrom both within and without the State of Texas. He said the commission's order, based on the state tender law prohibits any shipper from shipping any crude oil from any field or any products therefrom from any refinery or processing plant and any transporter from accepting for shipment any crude oil from any field or products therefrom from any refinery or processing plant to any point either within or without the State of Texas unless such shipment is accompanied by a tender approved by the state authorities.

NO FEDERAL TENDERS

TYLER, Tex., Jan. 7.—Announcement that no further meetings of the Federal Oil Tender Board will be held here, nor further federal tenders be required was made here today by Malcolm McQuorquodale, attorney, representing the Interior Department, following wired instructions from Washington giving effect to the decision of the Supreme Court invalidating Section 9(c) of the recovery act.

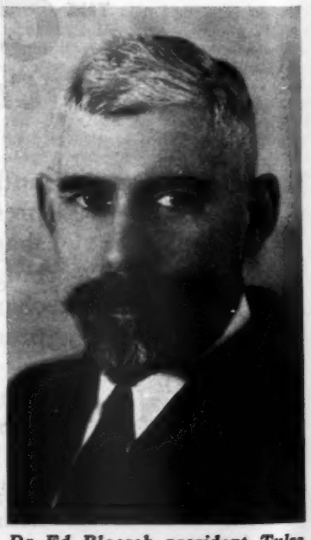
The Interior Department attaches were instructed to co-operate with state tender officials in every way they could, including the furnishing of such information they may have.

TWO RAILROADS RESTRAINED

AUSTIN, Tex., Jan. 7.—The Texas Railroad Commission Friday procured an order from Judge J. D. Moore in Travis County District Court restraining the Texas Pacific and Missouri Pacific railroads from accepting any shipments of crude or products for either interstate or intrastate shipment which were not accompanied by State Tender Board clearance. The commission claims that every shipment in the state either for points within or without the state must have a clearance from the State Tender Board before a shipper can ship or a transporter can accept for shipment.

Dr. Bloesch President of Tulsa Geologists

At the annual meeting of the Tulsa Geological Society held in the Tulsa Building, January 7, officers were elected to serve for the ensuing year: Dr. Ed Bloesch, consultant, president; Joseph L. Borden, Pure Oil Co., first vice president; Glen Scott Dille, Texas Co., second vice president; Sam H. Woods, Twin States Oil Co., secretary-treasurer, and Thomas C. Hiestand, W. C. McBride, Inc., editor. Members of the council, William E. Horkey, G. C. Siberson and T. H. Westby.



Dr. Ed. Bloesch, president, Tulsa Geological Society, 1935

Born in Switzerland, in 1884, Doctor Bloesch received his early education at his home town of Laufenburg, and attended the Universities of Zurich and Basle, and received his Ph. D. from Zurich in 1900. Doctor Bloesch came to this country in 1911 and was first field and later chief geologist for the Oklahoma State Oil Co. and left that company's services in 1915 to take up consulting work and has followed same ever since.

Complete Text of the Decision of the Supreme Court

(Continued from Page 11)

deemed to relate to the subject of Section 9(c) and thus to imply what is not there expressed. It is important to note that Section 9 is headed "Oil regulation," that is, Section 9 is the part of the National Industrial Recovery Act which particularly deals with that subject matter. But the other provisions of Section 9 afford no ground for implying a limitation of the broad grant of authority in Section 9(c). Thus Section 9(a) authorizes the President to initiate before the Interstate Commerce Commission "proceedings necessary to prescribe regulations to control the operations of oil pipe lines and to fix reasonable, compensatory rates for the transportation of petroleum and its products by pipe lines" and the Interstate Commerce Commission is to grant preference "to the hearings and determination of such cases." Section 9(b) authorizes the President to institute proceedings "to divorce from any holding company any pipe line company controlled by such holding company which pipe line company by unfair practices or by exorbitant rates in the transportation of petroleum or its products tends to create a monopoly." It will be observed that each of these provisions contains restrictive clauses as to their respective subjects. Neither relates to the subject of Section 9(c).

We turn to the other provisions of Title 1 of the act. The first section is "a declaration of policy."

It declares that a national emergency exists "which is productive of widespread unemployment and disorganization of industry, which burdens interstate and foreign commerce, affects public welfare, and undermines the standards of living of the American people." It is declared to be the policy of Congress "to remove obstructions to the free flow of interstate and foreign commerce which tend to diminish the amount thereof"; "to provide for the general welfare by promoting the organization of industry for the purpose of co-operative action among trade groups"; to induce and maintain united action of labor and management under adequate governmental sanctions and supervision"; "to eliminate unfair competition practices, to promote the fullest possible utilization of the present production capacity of industries, to avoid undue restriction of production (except as may be temporarily required), to increase the consumption of industrial and agricultural products by increasing purchasing power, to reduce and relieve unemployment, to improve standards of labor, and otherwise to rehabilitate industry and to conserve natural resources."

This general outline of policy contains nothing as to the circumstances or conditions in which transportation of petroleum or petroleum products should be prohibited, nothing as to the policy of prohibiting, or not prohibiting, the transportation of production exceeding what the states allow. The general policy declared is "to remove obstructions to the free flow of interstate and foreign commerce." As to production, the section lays down no policy of limitation. It favors the fullest possible utilization of the present productive capacity of industries. It speaks, parenthetically, of a possible temporary restriction of production, but of what, or in what circumstances, it gives no suggestion. The section also speaks in general terms of the conservation of natural resources but it prescribes no policy for the achievement of that end. It is manifest that this broad outline is simply an introduction of the act, leaving the legislative policy as to particular subjects to be declared and defined, if at all, by the subsequent sections.

It is no answer to insist that deleterious consequences follow the transportion of "hot oil," oil exceeding state allowances. The Congress did not prohibit that transportation. The Congress did not undertake to say that the transportation of "hot oil" was injurious. The Congress did not say that transportation of that oil was "unfair competition." The Congress did not declare in what circumstances that transportation should be forbidden, or require the President to make any determination as to any facts or circumstances, among the numerous and diverse objectives broadly stated, the President was not required to choose. The President was not required to ascertain and proclaim the condition prevailing in the industry which made the prohibition necessary. The Congress left the matter to the President without standard or rule, to be dealt with as he pleased. The effort by ingenious and diligent construction to supply a criterion still permits such a breadth of authorized action as essentially to commit to the President the functions of a legislature rather than those of an executive or administrative officer executing a declared legislative policy. We find nothing in Section 1 which limits or controls the authority conferred by Section 9(c).

We pass to other sections of the act. Section 2 relates to administrative agents which may be constituted. Section 3 provides for the approval by the President of "codes," for trades or industries. These are to be codes of "fair competition" and the authority is based upon certain express conditions which require findings by the President. Action under Section 9(c) is not made to depend on the formulation of a code under Section 3. In fact, the President's action under Section 9(c) was taken more than a month before a petroleum code was approved. Subdivision (e) of Section 3 authorizes the President, on his own motion or upon complaint, as stated, in case any article is being imported into the United States "in substantial quantities or increasing ratio to domestic production of any competitive article" under such conditions as to endanger the maintenance of a code or agreement under Title 1, to cause an immediate investigation by the Tartiff Commission. The authority of the President to act, after such investigation, is conditioned upon a finding by him of the existence of the underlying facts, and he may permit entry of the articles concerned upon such conditions and with such limitations as he shall find it necessary to prescribe in order that the entry shall not lend to render the code or agreement ineffective. Section 4 relates to agreements and licenses for the purposes stated. Section 5 refers to the application of the antitrust laws. Sections 6 and 7 impose limitations upon the application of Title 1, bearing upon trade associations and other organizations and upon the relations between employers and employes. Section 8 contains provisions with respect to the application of the Agricultural Adjustment Act of May 12, 1933.

None of these provisions can be deemed to prescribe any limitation of the grant of authority in Section 9(c).

Fifth. The question whether such a delegation of legislative power is permitted by the Constitution is not answered by the argument that it should be assumed that the President has acted, and will act, for what he believes to be the public good. The point is not one of motives but of constitutional authority, for which the best of motives is not a substitute. While the present controversy relates to a delegation to the President, the basic question has a much wider application. If the Congress can make a grant of legislative authority of the sort attempted by Section 9(c), we find nothing in the Constitution which restricts the Congress to the selection of the President as grantee. The Congress may vest the power in the officer of its choice or in a board or commission such as it may select or create for the purpose. Nor, with respect to such a delegation, is the question concerned merely with the transportation of oil, or of oil produced in excess of what the state may allow.

If legislative power may thus be vested in the President, or other grantee, as to that excess of production, we see no reason to doubt that it may similarly be vested with respect to the transportation of oil without reference to the state's requirements. That reference simply defines the subject of the prohibition which the President is authorized to fact, or not to fact, as he pleases. And if that legislative power may be given to the President or other grantee, it would seem to follow that such power may similarly be conferred with respect to the transportation of other commodities in interstate commerce with or without reference to state action, thus giving to the grantee of the power the determination of what is a wise policy as to that transportation and authority to permit or prohibit it, as the person, or board or commission, so chosen, may think desirable. In that view, there would appear to be no ground for denying a similar prerogative of delegation with respect to other subjects of legislation.

The Constitution states that "All legislative powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and a House of Representatives." Article 1, Section 1. And the Congress is empowered "to make all laws which shall be necessary and proper for carrying into execution" its general powers. Article 1, Section 8, Paragraph 18. The Congress manifestly is not permitted to abdicate or to transfer to others, the essential legislative functions with which it is thus vested. Undoubtedly legislation must often be adapted to complex conditions involving a host of details with which the national legislature cannot deal directly. The Constitution has never been regarded as denying to the Congress the necessary resources of flexibility and practicality, which will enable it to perform its function in laying down policies and establishing standards, while leaving to selected instrumentalities the making of subordinate rules within prescribed limits and the determination of facts to which the policy as declared by the legislature is to apply. Without capacity to give authorizations of that sort we should have the anomaly of a legislative power which in many circumstances calling for its exertion would be but a futility. But the constant recognition of the necessity and validity of such provisions, and the wide range of administrative authority which has been developed by means of them, cannot be allowed to obscure the limitations of the authority to delegate, if our constitutional system is to be maintained.

The Court has had frequent occasion to refer to these limitations and to review the course of congressional action. At the very outset, amid the disturbance due to war in Europe when the national safety was imperiled and our neutrality was disregarded, the Congress passed a series of acts, as a part of which the President was authorized, in stated circumstances, to lay and revoke embargoes, to give permits for the exportation of arms and military stores, to remit and discontinue the restraints and prohibitions imposed by acts suspending commercial intercourse with certain countries, and to permit or interdict the entrance into waters of the United States of armed vessels belonging to foreign nations.

These early acts were not the subject of judicial decision and, apart from that, they afford no adequate basis for a conclusion that the Congress assumed that it possessed an unqualified power of delegation. They were inspired by the vexations of American commerce through the hostile enterprises of the billigerent powers.

They were directed to the effective execution of policies repeatedly declared by the Congress, and they confided to the President, for the purposes and under the conditions stated, an authority which was cognate to the conduct by him of the foreign relations of the government.

The first case relating to an authorization of this description was that of The Brig Aurora, 7 Cranch 382. The cargo of that vessel had been condemned as having been imported from Great Britain in violation of the non-intercourse act of March 1, 1809. (2 Stat. 528.) That act expired on May 1, 1810, when Congress passed another act (2 Stat. 605, 606) providing that in case either Great Britain or France, before March 3, 1811, "shall . . . so revoke or modify her edicts as that they shall cease to violate the neutral commerce of the United States, which fact the President of the United States shall declare by proclamation, and if the other nation shall not within three months thereafter so revoke or modify her edicts in like manner," then, with respect to that nation, as stated, the provisions of the act of 1809, after three months from that proclamation, "shall . . . be revived and have full force and effect." On November 2, 1810, the President issued his proclamation declaring that France had so revoked or modified her edicts, and it was contended that the provisions of the act of 1809, as to the cargo in question, had thus been revived. The Court said that it could see no sufficient reason why the legislature should not exercise its discretion in reviving the act of 1809, "either expressly or conditionally, as their judgment should direct." The provision of that act declaring "that it should continue in force to a certain time, and no longer" could not restrict the power of the legislature to extend its operation "without limitation upon the occurrence of any subsequent combination of events." This was a decision, said the Court in Field vs. Clark, 143 U.S. 634, 683, "that it was competent for Congress to make the revival of an act depend upon the proclamation of the President, showing the ascertainment by him of the fact that the edicts of certain nations had been so revoked or modified that they did not violate the neutral commerce of the United States."

In Field vs. Clark supra, the Court applied that ruling to the case of "the suspension of an act upon a contingency to be ascertained by the President, and made known by his proclamation." The Court was dealing with Section 3 of the act of October 1, 1890 (26 Stat. 567, 612). That section provided that "with a view to secure reciprocal trade" with countries producing certain articles, "whenever, and so often as the President be satisfied" that the government of any country producing them imposed "duties or other exactions upon the agricultural or other products of the United States," which in view of the free list established by the act the President "may deem to be reciprocally unequal and unreasonable, he shall have the power and it shall be his duty" to suspend the free introduction of those articles by proclamation to that effect, and that during that suspension the duties specified by the section should be levied. The validity of the provision was challenged as a delegation to the President of legislative power, the Court reviewed the early acts to which we have referred, as well as later statutes considered to be analogous.

While sustaining the provision, the Court emphatically declared that the principle that "Congress cannot delegate legislative power to the President" is "universally recognized as vital to the integrity and maintenance of the system of government ordained by the Constitution."

The Court found that the act before it was not inconsistent with that principle: that it did not "in any real sense, invest the President with the power of legislation." As "the suspension was absolutely required when the President ascertained the existence of a particular fact" it could not be said "that in ascertaining that fact and in issuing his proclamation, in obedience to the legislative will, he exercised the function of making laws."

He was the mere agent of the law-mak-

Complete Text of the Decision of the Supreme Court

ing department to ascertain and declare the event upon which its expressed will was to take effect. Id. pp. 692, 693, the Court referred with approval to the distinction pointed out by the Supreme Court of Ohio in Cincinnati, Wilmington, etc., Railroad vs. Commissioner, 1 Ohio S.T. 88, between "the delegation of power to make the law, which necessarily involves a discredition as to what it shall be, and conferring authority or discretion as to its execution, to be exercised under and in pursuance of the law."

Applying that principle, authorizations given by Congress to selected instrumental views for the purposes of ascertaining the existence of facts to which legislation is directed, have constantly been sustained. Moreover, the Congress may not only give such authorizations to determine specific facts but may establish primary standards, devolving upon others the duty to carry out the declared legislative policy, that is, as Chief Justice Marshall expressed it, "to fill up the details" under the general provisions made by the legislature. Wayman vs. Southard, 10 Wheat, 1. 43. In Buttfield vs. Stranahan, 192 U.S. 470, 496, the act of March 2, 1897 (29 Stat. 604, 605) was upheld, which authorized the Secretary of the Treasury, upon the recommendation of a board of experts, to "establish uniform standards of purity, quality and fitness for the consumption of all kinds of teas imported into the United States. The Court construed the statute as expressing "the purpose to exclude the lowest grades of tea, whether demonstrably of inferior purity, or unfit for consumption, or presumably so because of their inferior quality." The Congress, the Court said, thus fixed "a primary standard" and committed to the Secretary of the Treasury "the mere executive duty to effectuate the legislative policy declared in the statute." "Congress legislated on the subject as far as was reasonably practicable, and from the necessities of the case was compelled to leave to executive officials the duty of bringing about the result pointed out by the statute." See Red "C" Oil Co. vs. North Carolina, 222 U.S. 380, 394.

Another notable illustration is that of the authority given to the Secretary of War to determine whether bridges and other structures constitute unreasonable obstructions to navigation and to remove such obstructions. Act of March 3, 1899, Sec. 18, 30 Stat. 1153, 1154. By that statute the Congress declared "a general rule and imposed upon the Secretary of War the duty of ascertaining what particular cases came within the rule" as thus laid down. Union Bridge Co. vs. United States, 204 U.S. 364, 386; Monogahela Bridge Co. vs. United States, 216 U.S. 177, 193; Philadelphia Co. vs. Stimson, 223 U.S. 605, 638. Upon this principle rests the authority of the Interstate Commerce Commission, in the execution of the declared policy of the Congress in enforcing reasonable rates, in preventing undue preferences and unjust discrimination in requiring suitable facilities for transportation in interstate commerce, and in exercising other powers held to have been validly conferred. St. Louis, I. M. & S. Ry. Co. vs. Taylor, 210 U.S. 281, 297; Intermountain Rate Cases, 234 U.S. 476, 486; Avent vs. United States, 266 U.S. 127, 130; N.Y. Central Securities Co. vs. United States, 287 U.S. 12, 24, 25. Upon a similar ground the authority given to the President in appropriate relation to his functions as commander-in-chief, by the trading with the enemy act as amended by the act of March 28, 1918 (40 Stat. 460), with respect to the disposition of enemy property, was sustained. "The determination," said the Court, "of the terms of sales of enemy properties in the light of facts and conditions from time to time arising in the progress of war was not the making of a law; it was the application of the general rule laid down by the act." United States vs. Chemical Foundation, 272 U.S. 1, 12.

The provisions of the Radio Act of 1927 (44 Stat. 1162, 1163), providing for assignments of frequencies or wave lengths to various stations, afford another instance. In granting licenses, the Radio Commission is required to act "as public convenience, interest, or as necessity requires." In constructing this provision, the Court found that the statute itself declared the policy as to "equality of radio broadcasting service, both of transmission and of reception," and that it conferred authority to make allocations and assignments in order to secure, according to stated criteria, an equitable adjustment in the distribution of facilities. The standard set up was not so indefinite "as to confer an unlimited power." Radio Commission vs. Nelson Brothers Co., 289 U.S. 266, 279, 285.

So, also, from the beginning of the Government, the Congress has conferred upon executive officers the power to make regulations—"not for the Government of their departments, but for administering the laws which did govern." United States vs. Grimaud, 220, U.S. 500, 517. Such regulations become indeed, binding rules of conduct but they are valid only as subordinate rules and when found to be within the framework of the policy which the legislature has sufficiently defined. In the case of the Grimaud, supra, a regulation made by the Secretary of Agriculture requiring permits for grazing sheep on a forest reserve of lands belonging to the United States was involved. The Court referred to the various acts for establishment and management of forest reservations and the authorization of rules which would "insure the objects of such reservation," that is, "to regulate their occupancy and use and to preserve the forests thereon from destruction." The Court observed that "it was impracticable for Congress to provide general regulations for these various and varying details of management" and that authorizing the Secretary of Agriculture to meet local conditions, Congress "was merely conferring administrative functions upon an agent, and not delegating to him legislative power. I.D. pp. 515, 516. The Court quoted with approval the statement of the principle in Field vs. Clark, supra, that the Congress cannot delegate legislative power, and upheld the regulation in question as an administrative rule for the appropriate execution of the policy laid down in the statute. See Wayman vs. Southard, supra; Interstate Commerce Commission vs. Goodrich Transit Co., 224 U.S. 194, 214, 215; Selective Draft Law Cases, 245 U.S. 366, 389; McKinley vs. United States, 249 U.S. 397.

The applicable considerations were reviewed in Hampton and Company vs. United States, 276 U.S. 394, where the Court dealt with the so-called "flexible tariff provision" of the act of September 21, 1922 (42 Stat. 858, 941, 942) and with the authority which it conferred upon the President. The Court applied the same principle that permitted the Congress to exercise its rate making power in interstate commerce and found that a similar provision was justified for the fixing of customs duties; that is, as the Court said, "if congress shall lay down by legislative act an intelligible principle to which the person or body authorized to fix such rates is directed to conform, such legislative action is not a forbidden delegation of legislative power. If it is thought wise to vary the customs duties according to changing conditions of production at home and abroad, it may authorize the chief executive to carry out this purpose with the advisory assistance of a tariff commission appointed under congressional authority." The Court sustained the provision upon the authority of Field vs. Clark, supra, repeating with approval what was there said—that "what the President was required to do was merely in execution of the act of Congress." Id, pp. 409-411.

Thus, in every case in which the question has been raised, the Court has recognized that there are limits of delegation which there is no constitutional authority to transcend. We think that Section 9(c) goes beyond those limits. As to the transportation of oil production in excess of state permission, the Congress has declared no policy, has established no standard, has laid down no rule. There is no requirement, no definition of circumstances and conditions in which the transportation is to be allowed or prohibited.

If Section 9(c) were held valid, it would be idle to pretend that anything would be left of limitations upon the power of the Congress to delegate its law-making function. The reasoning of the many decisions we have reviewed would be made vacuous and their distinctions nugatory. Instead of performing its law-making function the Congress could at will and as to such subjects as it chooses transfer that function to the President or other officer or to an administrative body. The question is not of the intrinsic importance of the particular statute before us, but of the constitutional processes of legislation which are an essential part of our system of government.

Sixth. There is another objection to the validity of the prohibition laid down by the executive order under Section 9(c). The executive order contains no finding, no statement of the grounds of the President's action in enacting the prohibition. Both Section 9(c) and the executive order are in notable contrast with historic practice (as shown by many statutes and proclamations which we have cited by which declarations of policy are made by the Congress and delegations are within the framework of that policy and have relation to facts and conditions to be found and stated by the President in the appropriate exercise of the delegated authority.)

If it could be said that from the four corners of the statute any possible inference could be drawn of particular circumstances or conditions which were to govern the exercise of the authority conferred, the President could not act validly without having regard to those circumstances and conditions. And findings by him as to the existence of the requierd basis of his action would be necessary to sustain that action, for otherwise the case would still be one of an unfettered discretion as the qualification of authority would be ineffectual.

The point is pertinent in relation to the first section of the National Industrial Recovery Act. We have said that the first section is but a general introduction, that it declares no policy and defines no standard with respect to the transportation which is the subject of Section 9(c). But if from the extremely broad description contained in that section and the widely different matters to which the section refers, it were possible to derive a statement of prerequisites to the President's action under Section 9(c) it would still be necessary for the President to comply with those conditions and to show that compliance as the ground of his prohibition.

To hold that he is free to select as he chooses from the many and various objects generally described in the first section, and then to act without making any finding with respect to any object that he does select, and the circumstances properly related to that object would be in effect to make the conditions inoperative and to invest him with an uncontrolled legislative power.

We are not dealing with action which, appropriately belonging to the executive province, is not the subject of judicial review, or with the presumptions attaching to executive action.

To repeat, we are concerned with the question of the delegation of legislative power. If the citizen is to be punished for the crime of violating a legislative order of an executive officer, or of a board or commission, due process of law requires that it shall appear that the order is within the authority of the officer, board or commission, and, if that authority depends on determination of fact, those determinations must be shown. As the Court said in Wichita Railroad & Light Co. vs. Public Utilities Commission, 260 U.S. 48, 59; "In creating such an administrative agency the legislature, to prevent its being a pure delegation of legislative powers, must enjoin upon it a certain course of procedure and certain rules of decision in the performance of its function. It is a wholesome and necessary principle that such an agency must pursue the procedure and rules enjoined and show a substantial compliance therewith to give validity to its action. When, therefore, such an administrative agency is required as a condition precedent to an order, to make a finding of facts, the validity of the order must rest upon the needed finding. If it is lacking, the order is ineffective. It is pressed on us that the lack of an express finding may be supplied by implication and by reference to the averments of the petition invoking the action of the commission. We cannot agree to this."

Referring to the ruling in the Wichita case, the Court said in Mahler vs. Eby, 264 U.S. 32, 44: "We hold that the order in that case made after a hearing and ordering a reduction was void for lack of the express finding in the order. We put this conclusion not only on the language of the statute but also on general principles of constitutional government."

We cannot regard the President as immune from the application of these constitutional principles. When the President is invested with legislative authority as the delegate of Congress in carrying out a declared policy, he necessarily acts under the constitutional restriction applicable to such a delegation.

We see no escape from the conclusion that the executive orders of July 11, 1933, and July 14, 1933, and the regulations issued by the Secretary of the Interior thereunder, are without constitutional authority.

The decrees of the Circuit Court of Appeals are reversed and the causes are remanded to the District Court with direction to modify its decrees in conformity with this opinion so as to grant permanent injunctions, restraining the defendants from enforcing those orders and regulations.

It is so ordered.

Justice Cardozo Dissents

Justice Cardozo alone dissented. He said he did not disagree with the basic reasoning of the chief justice.

"I am unable," he said, "to assent to the conclusion that Section 9(c) of the national recovery act, a section delegating to the President a very different power from any that is involved in the regulation of production or in the promulgation of a code, is to be nullified upon the ground that his discretion is too broad or for any other reason. My point of difference with the majority of the court is narrow. I concur that to uphold the delegation there is need to discover in the terms of the act a standard reasonably clear whereby discretion must be governed. I deny that such a standard is lacking in respect of the prohibitions permitted by this section when the act with all its reasonable implications is considered as a whole."

HUMBLE OVER ASSESSED

WASHINGTON, D. C., Jan. 7.—The Treasury Department announced the Humble Oil & Refining Co. of Houston Tex., had been over assessed $46,506.71 in its income tax for 1930 but said no part of the excess was subject to refund. The amount was abated.

PIONEER PRODUCER DIES

A. W. Boyd, pioneer producer in the Pennsylvania Field, died in Bradford, Pa., recently at the age of 88 years. Mr. Boyd at one time operated in Oklahoma.

LUCEY

"WHEREVER THERE'S OIL"

LUCEY PRODUCTS CORPORATION

TULSA, OKLAHOMA — HOUSTON, TEXAS

LUCEY EXPORT CORPORATION
NEW YORK CITY

Cole Committee Report on Petroleum Investigation

(Continued from Page 14)

7. Probable future of oil-burning, both domestic and industrial.

Imports and Exports

1. History of imports and exports.

(a) Development of foreign resources by American companies.

(b) Particular quality of imports, such as heavy crude for asphalt manufacture and fuel oil for ship bunkering, with decrease in imports of gasoline-crudes and of gasoline.

(c) Analysis of reasons for decline in exports.

(d) Probable future trends in imports and exports.

Crude Oil Production Costs

1. A regional comparative study of total costs per barrel throughout the United States. Data by unit-areas in which costs are similar, due to similar geological structures, depths of producing sands, and age of the fields, important factors in drilling and lifting costs.

2. Labor cost per barrel, covering total United States production.

3. Analysis of all costs relating to the production of crude oil.

4. Operating costs of stripper areas in Kansas, Illinois and Pennsylvania.

Interstate Relationships

1. Review of interstate or inter-regional movement of crude petroleum and products from 1920 to date.

2. Operations under the petroleum code.

3. Well abandonments.

4. Table showing approximate proportion of petroleum which is shipped from major producing states to other states.

5. Data showing interrelationship between intrastate and interstate shipments.

6. Methods for determining required crude oil production and its equitable allocation between states.

Harold L. Ickes, Secretary of the Interior and administrator for the petroleum industry, placed at the disposal of the subcommittee such technical staff from the Bureau of Mines, and other departments of the Interior Department, as the subcommittee might require. We selected as technical advisors the following employes of the Federal Government:

E. B. Swanson, chief of the Division of Production and Refining of the Petroleum Administrative Board.

Hale B. Soyster, chief, Oil and Gas Leasing Division of the U. S. Geological Survey.

W. S. Levingo, geologist of the Petroleum Administrative Board.

Ben E. Lindsly, senior petroleum engineer of the Bureau of Mines, Bartlesville, Okla.

Harold C. Miller, senior petroleum engineer of the Bureau of Mines, San Francisco, Calif.

A. J. Kraemer, senior refinery engineer of the U. S. Bureau of Mines.

H. A. Breakey, economic analyst of the Bureau of Mines.

Dr. F. L. Carmichael, consulting statistician of the Petroleum Administrative Board.

Dr. Katherine Carman, connected with the Petroleum Administrative Board.

Arthur H. Redfield, acting chief of the Petroleum Economics Division of the Bureau of Mines.

Dr. John W. Frey, Petroleum Administrative Board, marketing expert.

Kenneth L. Stone, chief accountant of the Petroleum Administrative Board on the subject of cost of crude oil production.

Preparation of Report

These experts, in the various fields assigned to them, have worked continuously since the adjournment of Congress, in preparation for our report what we consider to be the most illuminating and intelligent analysis of geology, production, refining, transportation, marketing, export and import of petroleum and its products, that has ever been compiled. The studies made by Dr. John W. Frey and Kenneth L. Stone were not completed in time to be incorporated as part of the record submitted by the subcommittee, but Mr. Stone's study is found in a printed pamphlet just issued by the Petroleum Administrative Board of the U. S. Department of the Interior, entitled, "Preliminary Report on a Survey of Crude Petroleum, Cost of Production for the Years 1931-1933, in Comparison With Years 1927-1930," and may be found in the office of the Superintendent of Documents, Government Printing Office. Doctor Frey's study will be available during the early part of the first session of the Seventy-fourth Congress, but in lieu thereof he submitted a statement found on page 2,884 of the hearings. David White, principal geologist, and a number of members of the Geological Survey, associated in the General Land Office and Office of Indian Affairs assisted Mr. Soyster in the very able and complete work entitled, "Geology and Occurrence of Petroleum in the United States," found in Volume 2 of the hearings. The report of Harold C. Miller and Ben E. Lindsly on petroleum development and production, and the report of A. J. Kraemer on effect of technologic facts on supply and demand of petroleum, are found also in Volume 2 of the hearings. The reports of the other members of the staff, working with the subcommittee, are found in Volume 1.

To the technical staff assisting the subcommittee, and the assistants in the various government departments who collaborated with them and with members of the subcommittee from time to time, the subcommittee extends its sincere thanks.

During the interim between the adjournment of Congress and the formal taking of testimony, the subcommittee as a whole, or individual members thereof, visited the following principal oil-producing states: California, Colorado, Illinois, Indiana, Kansas, Michigan, New York, Ohio, Oklahoma, Pennsylvania, Texas, West Virginia, and Wyoming. On these visits the subcommittee inspected many of the major fields and held informal conferences with men associated in various capacities with the petroleum industry, and also with the governing officials of some of the states.

Hearings Conducted

After information had been acquired by the subcommittee, as a result of actual contact with the many practical operations of the petroleum industry and by consultation with the technical staff, the subcommittee conducted hearings during the week of September 17 in Washington. For the accomodation of witnesses in other parts of the country the subcommittee, in addition to its sessions in Washington, conducted hearings in Oklahoma City, Okla.; Dallas, Tex.; and Los Angeles, Calif. Many witnesses were heard in person and many contributions by letter and pamphelts were received. The hearings were closed with a total of 2,887 pages of printed matter, which includes the testimony of 136 witnesses and statistical data. The technical phases of the problem are found in the testimony of leading engineers and experts. The views of the leaders of the petroleum industry, whether associated with integrated or non-integrated companies have been obtained. The attitude of the Federal Government has been presented by those responsible, to a large extent, for the administration of the petroleum industry either through the code, or otherwise. The governing officials of many of the important oil-producing states presented frank and helpful statements. It is a pleasure to state, that in not one single instance, was it necessary to subpoena anyone before the subcommittee.

A thorough and detailed index of all testimony taken by the subcommittee has been compiled and is printed and bound in Volume 5 of the hearings. It provides a ready reference to every subject considered by and discussed before the subcommittee. In view of this exhaustive analysis of the testimony, the subcommittee has not thought it necessary to include herein a detailed summary of all the evidence.

When it is realized how imperative and absolutely essential petroleum and its products are to the nation, not only in war times but in peace times as well, any threatened or possible exhaustion of such a resource is of serious consequence.

Petroleum is admittedly irreplaceable. The quantity of petroleum in known fields and pools is capable of fairly accurate determination. With the quantity of known reserves established and the discoveries in the future entirely problematical, it is natural that the conservation of this very valuable resource has claimed the attention of federal and state governments, as well as of the petroleum industry, for some time.

Conservation Board

During the war, the importance of our petroleum resources was brought more forcibly to the attention of the country as a whole than ever before. In December of 1924, President Coolidge authorized the formation of the Federal Conservation Board, consisting of the Secretaries of War, Navy, Interior and Commerce. In doing so, President Coolidge stated:

"The future might be left to the simple working of the law of supply and demand, but for the patent fact that the oil industry's welfare is so intimately linked with the industrial prosperity and safety of the whole people, that Government and business can well join forces to work out this problem of practical conservation."

President's Letter

The Federal Oil Conservation Board submitted five interesting and able reports, the last in 1932. The hearings before the board and the reports of the board are public documents and we commend all of them to the members of Congress. The concern expressed by President Coolidge has been reiterated in one form or another by each succeeding President. In the early part of the present administration, President Roosevelt addressed the following letter to John N. Garner, president of the Senate, and Henry T. Rainey, Speaker of the House:

"As the Congress is doubtless aware, a serious situation confronts the oil-producing industry. Because oil taken from the ground is a natural resource which once used cannot be replaced, it is of interest to the nation that its production should be under reasonable control for the best interests of the present and future generations.

"My administration, for many weeks, has been in conference with the governors of the oil-producing states and with component parts of the industry, but it seems difficult, if not impossible, to bring order out of chaos only by state action. In fact, this is recognized by most of the governors concerned.

"There is a widespread demand for federal legislation. May I request that this subject be given immediate attention by the appropriate committee or committees? The Secretary of the Interior stands ready to present any information or data desired.

"May I suggest further that in order to save the time of the special session it might be possible to incorporate action relating to the oil industry with whatever action the Congress decides to take in regard to other industries—in other words, that consideration could be given at the same time that action is taken on the bills already introduced and now pending in the committee."

Connally Amendment

With the passage of the National Industrial Recovery Act, the oil industry like other industries, was placed under a code. Special sections dealing with the importation of petroleum and its products were included. Another special section made provision for the exact type of regulation to be imposed on that industry. This special section known as Section 9(c) or "the Connally amendment" is as follows:

"The President is authorized to prohibit the transportation in interstate and foreign commerce of petroleum and the products thereof produced or withdrawn from storage in excess of the amount permitted to be produced or withdrawn from storage by any state law or valid regulation or order prescribed thereunder, by any board, commission, officer, or other duly authorized agency of a state. Any violation of any order of the president issued under the provisions of this subsection shall be punishable by fine of not to exceed $1,000, or imprisonment for not to exceed six months, or both."

The Secretary of the Interior was designated as oil administrator and the Petroleum Administrative Board was created with extremely important duties.

Since the enactment of the National Industrial Recovery Act and the adoption of the petroleum code thereunder, there has been much litigation with respect thereto in state and federal courts. The principal cases which present constitutional questions and which the subcommittee deems of vital importance, are the Amazon and Panama cases initiated in the State of Texas and argued on December 10, 1934, before the Supreme Court of the United States. The importance of the decision in these cases, which is expected to be delivered at an early date, is discussed later in this report.

Previous Recommendations

For many years conservation of petroleum resources has been of very definite concern to the oil-producing states, resulting in waste and proration statutes being passed and in effect today. Many of these statutes provide for separate agencies with broad authority. In addition to the interest of the Federal Government and that of the oil-producing state governments, studies and recommendations have been made by the various groups within the industry. The Federal Oil Conservation Board, reporting finally in 1932, recommended that the producers of petroleum be relieved of federal antitrust legislation, to aid in voluntary co-operation in endeavors to limit production of crude oil in the United States. The Committee on Mineral Law of the American Bar Association has considered the practical and constitutional problems involved. Various solutions to these problems were proposed. Interstate compacts for the regulation of the production of petroleum, with the principal oil-producing states as contracting parties, were suggested, as was actual regulation of the business by the Federal Government. A proposed federal law drafted to effect such an end was included. Two bills, one to provide for voluntary "unit development" or co-operation voluntarily among all the owners of an oil field for its most economic operation by a federal law lessening the restraints of the anti-trust laws, and the other to provide for compulsory unit development proposed for enactment by state legislatures, were submitted. The American Institute of Mining and Metallurgical Engineers reported the addresses of many prominent authorities favoring some form of restraint on the wide open competitive methods, and also discussions by Roscoe Pound, dean of the Law School of Harvard University, and by Henry M. Bates, dean of the Law School of the University of Michigan, dealing with certain legal questions. In 1925 a report of a committee of 11 to the American Petroleum Institute on the subject, "American Petroleum—Supply and Demand," was made. This survey purported in its own language to be thorough and country-wide, and it incorporated the opinions and findings of experts and scientists in the industry and in related fields. Frequent reference to this report is found in the hearings.

The Planning and Coordination Committee of the petroleum industry under the code, has been very active from the time of its organization. Representatives of this group have appeared frequently before the subcommittee. Judge Amos L. Beaty, chairman of the Planning and Coordination Committee, testified and later presented a brief in support of legislation which he favored. On December 19, 1934, the subcommittee received a letter

from the Planning and Coordination Committee enclosing draft of a bill which it recommends. This letter did not reach the subcommittee in time to be printed as part of the hearings.

The American Petroleum Institute, an active organization consisting of representatives of integrated and non-integrated companies, met in Dallas, Tex., on November 12 to 15, inclusive. At this session majority and minority reports recommending concrete legislation were presented. Testimony before the subcommittee explaining the attitude of the American Petroleum Institute is found in many places in the hearings. The personnel of the board of directors of the American Petroleum Institute, a copy of the majority and minority reports and the division of vote by the board of directors, are found in the hearings at pages 1,754 to 1,759.

Interstate Compact

At various times, the governors of the oil-producing states have attempted to solve the major problems, through the medium of interstate compacts. In 1931, a compact between some of the states was agreed upon, but was later declared illegal. Proposed federal legislation to permit such compacts was considered by a committee of the Seventy-second Congress. On December 3, 1934, a meeting was held at the home of Governor-elect E. W. Marland, in Ponca City, Okla., for the purpose of discussing the possibility of an interstate compact. That meeting adjourned to January 3, 1935. The resolutions presented by the governors and governors-elect of the oil-producing states attending that meeting are found in the record compiled by the subcommittee. (Page 2,884).

Hearings on H. R. 9,676, and S. 3,496, known as the Disney Bill and the Thomas Bill respectively, were held in the second session of the Seventy-third Congress. Section 1 of H. R. 9,676, which is a statement of policy, was used as a basis for the resolution under which the subcommittee has functioned.

The Secretary of the Interior, Harold L. Ickes, in an address delivered at the meeting of the American Petroleum Institute in Dallas, in November last, discussed the question of making the petroleum industry a public utility, and the chief executive of one of the leading companies in the industry, in a statement before the subcommittee, discussed the question of the nationalization of the industry. The subcommittee, however, has not had the time to go into either one of these subjects and express no opinion thereon.

It is evident from the foregoing brief summation of federal, state and other activities manifesting concern as to our petroleum resources and interest in the conservation thereof, that the subject is of unusual imporance. The subcommittee is of opinion that the hearings filed herewith, along with the available data from sources hereinbefore mentioned and many others, present a wealth of information for the consideration of Congress in dealing with the many subjects incident to petroleum legislation.

Eight Oil States Vote for Interstate Compact

(Continued from Page 8)

be preceded by authorization by the legislatures of the respective states.

"Now, therefore, be it resolved, that:

"1. We recommend to our respective state governments the enactment of a statute in substantially the form hereto annexed.

"2. We suggest that the governor of each oil-producing state shall promptly advise the Governor of Oklahoma of the enactment of this or similar authorizing legislation.

"3. We suggest that when three or more states have enacted authorizing legislation, the Governor of Oklahoma shall reconvene this conference, and that the representatives who have been so authorized shall proceed to draft a compact, in co-operation with the representatives of such other states as desire to participate, in accordance with their authorizing statutes.

Draft of a State Statute

"An act authorizing an interstate compact for the conservation and stabilization of the American petroleum supply.

Be it enacted, etc.

"Section 1. The governor is authorized to appoint a representative to meet with representatives of the governors of other petroleum producing states, and of the United States, for the purpose of agreeing upon a compact among such states effecting the following objectives:

"(a) Establishment of a joint state and federal fact-finding agency to consist of one representative of each compacting state appointed by the governor and one representative of the United States as Congress or the President shall direct. Said agency shall make periodic findings, subject to approval and modification by the President, of the demand for petroleum to be produced within the United States or withdrawals from storage, and for petroleum and products thereof to be imported. It shall thereupon, subject to concurrence of representatives of compacting states capable of together producing two-thirds of the demand for domestic production so found, and approval and modification by the President, determine the part thereof allowable as production within each petroleum producing state.

"(b) Voluntary regulation of production by each compacting state within its own borders in accordance with said determination of the joint fact-finding agency, to the extent that and in such manner as the laws of each state may authorize.

"(c) Formulation by the joint agency of uniform conservation measures and tax laws which it shall recommend to the compacting states, and exercise by said agency of such incidental powers as may be agreed upon;

"Sec. 2. No compact made under the authority of this act shall bind this state unless and until:

(a) Said compact shall be ratified by the legislatures of two of the states of Texas, Oklahoma, California, Kansas and New Mexico, and the legislature of this state, and Congress shall consent thereto.

"(b) Congress shall make provision for the limitation of importations of petroleum and the products thereof, including natural asphalt, to not to exceed 4.5 per cent of the domestic allowable production of crude petroleum as determined in accordance with the findings referred to in Section 1.

"(c) Congress shall provide for the control of interstate movements of petroleum produced or withdrawn from storage in violation of the laws and valid regulations of the several states, and products of such petroleum;

"(d) Congress shall provide for the control of interstate movement of petroleum produced in any state in excess of the determination, referred to in Section 1, of allowable production within said state as approved by the President, and products of such petroleum."

Telegrams From Cole

William P. Cole, Jr., chairman of the subcommittee of the Interstate and Foreign Commerce Committee of the House of Representatives, which subcommittee conducted an investigation of the petroleum industry and filed a preliminary report with the Speaker of the House of Representatives at the same time the conference of governors opened here, sent two telegrams to the conference, one addressed to E. W. Marland and the other to Jack Blalock. The telegrams follow:

"Honorable E. W. Marland,
"Governors' Conference,
"Ponca City, Okla.

"The report filed by the subcommittee this morning contained the following reference to state compacts:

"Another reason for not submitting legislation with this report is the pending effort of the governors of the oil-producing states to effect an interstate compact. We have made reference to the first meeting of the governors' conference on December 3, last. A meeting will be held simultaneously with the convening of the Seventy-fourth Congress.

"We strongly urge upon the oil-producing states the adoption of state compacts to deal with the problems of the production of petroleum with which individual states are powerless to cope. The subcommittee clearly realizes the principle of state compacts for the purpose of effecting a common end of state interests. Other plans for dealing with the problems of petroleum production outside of state lines are full of constitutional questions. State compacts flexible in operation and over which the President of the United States or a federal agency in the interest of the consuming masses of the nation may hold some veto power is an ideal solution of those problems of petroleum production which cannot be solved by modification of the 'law of capture' and other legislation operating within state boundaries.

"We are confident that the governors of the oil-producing states and the majority of the industry within those states are cognizant of the common sense theory that waste of petroleum resources must be prevented. Hugh waste, such as the committee has witnessed in the Panhandle of West Texas, should not be permitted to continue. Waste of many kinds in other fields both past and present shock any one possessing familiarity therewith.

"At the meeting of the governors and the governors-elect and representatives of governors held on December 3, various important resolutions looking to the formation of an interstate compact were offered. It is the understanding of the subcommittee that these resolutions will be before the second meeting on January 3, 1935.

"This discussion and consideration by the governors of our oil-producing states coming at this time when the legislatures of all of these states are either in session or about to convene presents ample opportunity for the oil-producing states through actual agreement and approval to present to the Seventy-fourth Congress before its adjournment a definite, specific compact for its consideration.

"It will not take many weeks after January 3 for the Congress to decide whether the effort of the governors of the oil-producing states promises worthwhile results. We believe they should be given the opportunity to take the initiative in drafting definite proposals without the Congress setting forth in a permissive way something in advance for the states to adopt. Something real and substantial may grow out of the pending effort. If it does not, the Seventy-fourth Congress will have ample time to pass such legislation as may be deemed necessary.

"The report recommends establishment of permanent federal agency commission or board with broad powers. Among other things, 'representation of the Federal Government, if need be, in any co-operative interstate compact agreed upon and approved by the Congress.'

"The subcommittee will file a supplemental report after the decision of the Supreme Court in the Amazon and Panama cases and after a reasonable time for the results of the governors' conference has expired. I am sending a telegram to Mr. Blalock which may contain some parts of the report in addition to the foregoing.

"William P. Cole, Jr., chairman."

"Jack Blalock,
"Jens Marie Hotel,
"Ponca City, Okla.

"The subcommittee report filed this morning. I wired Governor Marland in full language addressed to the governors' meeting affect interstate compact. Rather than repeat same here suggest that you read his wire. The committee is not presenting concrete legislation at this time deciding to await the outcome of the efforts of the governors' conference and the decision of the Supreme Court in the Amazon and Panama cases and the report of the National Resources Board. We find that an excessive supply of petroleum and its products to meet current demand undoubtedly exists and based upon estimates of known reserves and excessive supply of petroleum to meet further demand does not exist. We do not believe that the Petroleum Administrative Board should be continued as a permanent agency in its present form and recommend that federal legislation establishing permanently the interest of the Federal Government in the petroleum industry should provide for an agency commission or board and that the Bureau of Mines might very easily be revamped for the purpose. The subcommittee feels that such an agency should have sufficient personnel and authority to study continuously the status of the petroleum reserves, encourage discoveries of new pools, assist in improving present day methods of production, study the possibility and expense of repressuring in various existing fields, systematically determine the total demand for petroleum and its products both domestic and foreign, have jurisdiction over the management of oil-producing public and Indian lands, be given jurisdiction to establish pipe line rates unless the Interstate Commerce Commission is given greater appropriation to handle more expeditiously this subject now before it and to study and make report as to the advisability of divorcing pipe lines, recommend at regular intervals to the President of the United States. The President being given authority by Congress to approve limitations upon the importation of petroleum and its products including natural asphalt so as to prevent importation thereof from interfering with current domestic production by supplying an undue proportion of the domestic consumption and export demand therefor to represent the Federal Government if need be in any co-operative interstate compact agreed upon and approved by the Congress and in general to possess all other necessary authority so as to present that dignity from a national standpoint to which the subcommittee believes the petroleum industry is entitled. Coal, timber, and other natural resources might properly also be included under the jurisdiction of this agency. It is the purpose of the members of this subcommittee, all of whom have been re-elected to the Seventy-fourth Congress, to ask the permission of the Seventy-fourth Congress to file a supplemental report when the decision of the Supreme Court in the Panama and Amazon cases shall have been rendered. The result of the governors' conference now in session with respect to an interstate compact shall have been concluded and the full report of the National Resources Board shall have been published.

"William P. Cole, Jr., chairman."

Quick Action Forecast

Statements made here were to the effect efforts will be made at once in Oklahoma, California, New Mexico, Kansas and Illinois and in other oil producing states to have the legislatures adopt legislation along the lines of the suggested statute adopted at the conference. Then, as soon as three states adopt such legislation, the governor of Oklahoma will then reconvene the conference for the drafting of an interstate compact.

The official representatives of the states at the conference, which was a reconvened session of the first conference held here on December 3, were: Governor-elect E. W. Marland, for Oklahoma; Jack Blalock, Texas; Hiram M. Dow, New Mexico; T. C. Johnson and E. B. Shawver, Kansas; John E. Farrell, Louisiana; R. H. Cummins and Jeff Davis, Arkansas; R. M. Patterson, California, and William H. Bell, Illinois. Among others attending the conference were Wirt Franklin, president, Independent Petroleum Association of America; Col. Patrick J. Hurley, former Secretary of War and now legal adviser to Mr. Marland in the matter of formation of an interstate compact; Northcutt Ely, former executive assistant to Secretary of the Interior Wilbur; Mac Q. Williamson, attorney general elect of Oklahoma; John V. Olvey, Longview, Tex., and C. C. Brown, Oklahoma.

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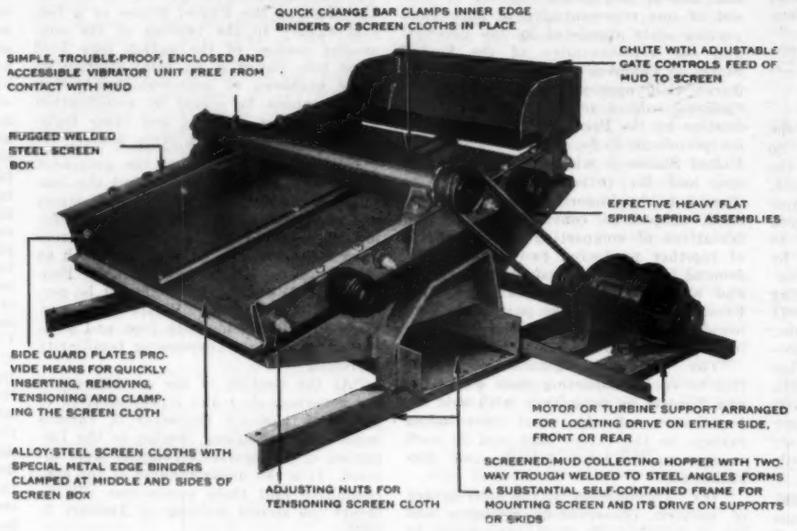

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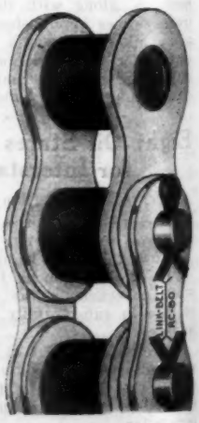

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Operators Pushing Development of West Tuleta Field in Southwest Texas; Find New Gas Sand

SAN ANTONIO, Tex., Jan. 7.—While the Southwest Texas district was recovering from the holiday shutdown, the West Tuleta Field, Bee County, and the discovery of a new gas sand in the Barbacoas or Jeffries-Lambeth Field, Starr County, held the attention of operators during the week.

Development in the West Tuleta Field continues at a fast stage. The best completion in the field was that of Edwin M. Jones' No. 1 Silcock for an initial production of 288 bbls. per day through a quarter-inch choke with tubing pressure 350 pounds and casing pressure 650 pounds from a total depth of 3,928 feet. Blanco Oil Co. and others' No. 2-A Perez, southeast outpost test was in process of completion. It was still flowing into the pits, making some oil and a small amount of salt water. It is bottomed at 3,924 feet. Another outpost test due for completion is Houston Oil Co.'s No. 1 Strauss, southwest of production, which has cemented casing, after making a 20-minute drill stem test which showed 14 fourbles of oil. The Pettus sand was encountered from 3,950-59 feet, the total depth. It is almost assured of making a good producer and should be completed by the middle of the week.

No definite locations have been announced for the Dirks Field, which was opened up last week by the completion of Dirks Brothers' No. 1 Roth, located 2 miles west of the Tuleta Field, Bee County. It is reported that two major companies are dealing for a block of acreage around the test. The discovery operators are getting started on another wildcat in the county. It is No. 1 Foley, located 1 mile northwest of the old Holzmark gas area in the western part of the county.

Angelita District

Interest in the Angelita district, San Patricio County, was revived during the week, when Humble Oil & Refining Co. announced location for its No. 1 Welder, 2,850 feet northwest of the northwest line of the Circle W. Oil Co.'s 150-acre Welder tract, and 2,400 feet southwest of the northeast line of Humble Oil & Refining Co.'s 300-acre Welder tract in the Villareal Survey. Interest was also revived in the Sinton Field, due to the showing being made by Heep Oil Corp.'s No. 4 Welder, which is reported to be making approximately 100 bbls. of oil daily, and an ungauged amount of salt water. The test was carried to a total depth of 7,247 feet, and production was developed in a new sand after the operators had plugged back and perforated the casing from 5,880-86 feet. It opens up the first real producer for the field, and is located 4,000 feet east of the discovery well in the J. F. Portillo Survey. In the same area, Plymouth Oil Co.'s No. 2-B Welder, a proposed deep test for the field, is coring in sand below 5,387 feet and is reported to be showing some gas.

Along the Fault zone area in Lee County, the wildcat test of Pederson and others' No. 1 Turner, in the Tanglewood area, western Lee County, is reported to have resumed operation after 6⅝-inch casing had been cemented at 6,330 feet. It is bottomed at 6,347 feet, reported to be in the Georgetown lime. In northern Guadalupe County, east of Kingsbury, H. H. Weinert and others' No. 1 Schmidt is drilling below 2,150 feet and had not encountered the chalk.

In the extreme northeast corner of Zavala County, Humble Oil & Refining Co. has abandoned its No. 1 R. L. Ball at approximately 2,900 feet, after it had tested the Edwards lime and found it nonproductive. Location is the Luciana De La Barza Survey.

Eastland Oil Co.'s No. 5-E Jeff Love, a prospective pool opener in the southwest part of Kerr County, which showed for a well two weeks ago, is still shut down at 3,530 feet and has not been tested. It is standing with approximately 1,500 feet of oil in the hole, and the operators will lower the casing which was set at 3,065 feet in an attempt to shut off some fresh water. A total of six tests have been drilled in the area and the majority of them had good showings of oil, but failed to develop production in commercial quantities. Location of No. 5-E Love is in Survey No. 1,581.

Deeper Gas Horizon

More interest was added to Starr County when Merren, Johnson and Jeffries' No. 2 Starr County Cattle Co. opened up a deeper gas horizon for the Barbacoas or Jeffries-Lambeth Pool when it was completed for a large dry gas well in sand, from 2,688-2,710 feet, the total depth. Tubing pressure registered 1,150 pounds and casing pressure was 1,050 pounds. It was carried deeper after it had tested some gas, oil and salt water in the regular pay horizon found from 2,550-2,600 feet. The showing being made by the test is expected to cause considerable drilling in the vicinity in search of oil production in the same sand. Except for the Texas Co.'s single producer in the Roma Field, gas production from this new 2,700-foot horizon opens up the deepest producing horizon found in the county.

Sam Fordyce Field

Four completions and four new locations were reported to the Sam Fordyce Field, Hidalgo County. Showers and Moncrief's No. 1 American State Bank & Trust Co., Tract 276, Porcion 39, encountered saturated sand from 2,755-62 feet and was completed for an initial production of 35 bbls. per hour on a one-quarter inch choke, from a total depth of 2,762 feet. Phillips Petroleum Co.'s No. 1 Seabury, a northwest outpost test in Tract 256, Porcion 38, perforated casing from 2,702-11 feet and was completed for a 30,000,000-foot gas well. Total depth is 2,762 feet. Homer Reed's No. 1 Florea, Porcion 39, Tract 268, cored sand from 2,798-2,802 feet and was completed for an initial production of 80 bbls. daily through a one-sixteenth inch choke with tubing pressure 275 pounds. It is bottomed at 2,802 feet. Lucky-Blocker and Cosmo Petroleum Co.'s No. 1 F. B. Guerra, Porcion 40, Tract 254, was completed for an estimated 20,000,000-foot gas well from a 67-foot sand section at 2,683-2,750 feet. Location is approximately 4,500 feet east and slightly north of the discovery well. Another test due for completion is Rogers Oil & Gas Co.'s No. 1 Francisco B. Guerra, Porcion 40, Tract 254, about 4,800 feet east of the discovery. Late in the week the operators were drilling plug, after casing had been cemented at 2,761 feet. Saturated sand was cored from 2,727-51 feet, and the lower five feet of the casing was perforated.

The four locations made were Weekly Oil Corp.'s No. 2 C. E. Smith in Tract 40, Porcion 278, southeast of the discovery and the most southeasterly test in the field; Heep Oil Corp.'s No. 3 Seabury and others,' Tract 256, Porcion 38, northwest of the discovery; Navarro Oil Co.'s No. 1 A. F. De Flores in Tract 275, Porcion 40, east and slightly south of the discovery, and Alamo Drilling Co.'s No. 1 Francisco B. Guerra in Tract 254, Porcion 40.

Abandon Wildcat

In the western part of Hidalgo County and several miles east of the Sam Fordyce Field, King-Wood Oil Co. has abandoned its No. 1 Fairbanks, a wildcat test located in Porcion 64, at a total depth of 4,700 feet. The same company announced location for a new wildcat to be drilled in the same county on the W. M. Doughty lease on the company block of 1,773 acres in the northern part of the county. Location is in Tract 90 of the San Salvador Del Tule Grant.

Over the line in Starr County, John H. Clopton has made location for its No. 1 Roos and others, in the southeastern part of the county, about 8 miles west and a little north of the Sam Fordyce Field. The test is located in the center of approximately 3,800-acre tract and will be drilled to at least 4,500 feet to the Cockfield section, and may go deeper. It is expected to start up within a few weeks and will be an interesting test. Due east, Sun Oil Co. has a block of several thousand acres, and there is considerable interest in that area.

East of the Government Wells Field, Duval County, and south of Humble Oil & Refining Co.'s No. 1 Ruiz, which opened up a new field for the county last week, Magnolia Petroleum Co.'s No. 1 Herbst in Survey 70 is drilling below 2,900 feet, after a test from 2,768-75 feet showed nothing of importance. It is located 1½ miles south of the discovery well, which is producing around 50 bbls. of oil and 50 bbls. of salt water daily.

Daily average production for week ending December 29:

SAN ANTONIO DISTRICT	Daily average
Field and county—	
Darst Creek, Guadalupe	9,102
Luling, Caldwell	3,447
Salt Flat (Brunner), Caldwell	4,264
Other pools	4,492
Total San Antonio district	23,297
LAREDO DISTRICT	
Cole, Webb-Duval	1,805
Escobas, Zapata	1,947
Government Wells, Duval	19,648
Sam Fordyce, Hidalgo	3,021
Other pools	6,105
Total Laredo district	31,326
Total San Antonio district	23,297
Total Southwest Texas district	54,623

Wildcat Operations in Southwest Texas

Week Ending January 5

BANDERA COUNTY

W. B. Kyle et al's No. 1 Duke, 200 ft. NW line, 150 ft. SW line of J. A. Bennett Sur. No. 7.
Moving in material.

Plateau Oil Co.'s No. 1 Garrison Sur. No. 506, 1,500 ft. from N and 2,700 ft. from E lines of Sur. (3 mi. SW of Medina).
Trying to lower csg.; T.D. 1,235 ft.

BASTROP COUNTY

G. L. Cline's No. 1 D. B. Lane 100 ac., 150 ft. N and W lines of Sandifer Sur.
Location.

Jim Harper's No. 1 Harris.
Location.

BEE COUNTY

Atkins & O'Neil's No. 1 M. Woods, 466 ft. from N and E lines of NW Sec. 8.
Spudded.

Dirk Bros.' No. 1 Foley, N cor. of W. L. Foley tract, about 1 mile N of Simras' No. 1 Holzmark.
Moving in machine.

Arthur W. Gray's No. 1 Rutledge, 3,322 ft. from N line, 250 ft. from E line of 200-ac. tract in B. Q. Hadley Sur.
Location.

Cecil Hagan's No. 1 John R. Scott, 1½ mi. NE of Morgan test.
Drlg. 3,000 ft.

R. M. Herod's No. 5 Kimball, 310 ft. from E line, 150 ft. from N line of 110-ac. tract in S. Winship Sur.
Derrick; comp.; wtr. well.

Mid-Continent Crude Oil Co.'s No. 3 Kimball (Grayburg area).
T.D. 3,555 ft.; P.B. to 3,300 ft.; S.D.

Morgan et al's No. 1 Demroy, 1 mile N of Morgan's No. 1 Hicks.
Drlg. 4,298 ft.

Southwest Exploration Co.'s No. 1 Hayden & Bruckham, center of farm tract in Uranga grant.
Location.

R. J. Worthington et al's No. 1 Rutledge, 1,000 ft. from N line and 200 ft. from E line of A. Hadley Sur.
T.D. 3,434 ft.; washing down over twisted drill pipe.

BEXAR COUNTY

Bender and Krister's No. 1 Evans, 1,200 ft. W line, 200 ft. N line of 313.7-ac. tract in Dela Garza Sur.
Drlg. 1,400 ft.

Campbell's No. 1 Cantu, offsetting Meador's No. 1 Cantu, 150 ft. S line, Arocha Sur. No. 15.
Moving in material.

N. G. Carter's No. 1 Ruiz, western part of county; (work over).
T.D. 1,710 ft.; standing.

Eckert & Stieren's No. 1 Annie I. Terrell, 79.5-ac., 150 ft. E line, 1,500 ft. N line of tract.
Abd. 1,525 ft.

C. A. Ingersoll's No. 1 Mann, S of Von Ormy in Rolen Sur.
Moving in.

Jones & Kieffer's No. 1 LaGrane, NW cor. of tract, 210 ft. each way, F. Rolen Sur.
Drlg. shale 438 feet.

Geo. O'Neill et al's No. 1 Salek Cherniarsky, E of Eckert Field.
Drlg. 1,100 ft.

Duke Phillips' No. 1 Anna Lieck, 490 ft. S Seguin Road, 12 miles E of San Antonio.
Showing oil; depth not reported.

R. Y. Walker's No. 1 L. A. Hamilton, 550 ft. SE and NW cor. 1,110 ft. NE of NW line of tract, Blk. 4,007.
T.D. 1,601 ft. in Edwards; dry; standing.

BROOKS COUNTY

Helmrich & Payne's No. 1 Scott and Hooper, Palo Alto y Guerra grant.
Location.

CALDWELL COUNTY

O. Dawn's No. 1 F. Tiller, 250 ft. from N line, 1,000 ft. from E line of 37-ac. tract, in G. Hinds Sur.
T.D. 2,483 ft.; standing 500 ft. oil.

Kurz Oil Co.'s No. 1 Kurz ranch fee, 4,000 ft. SW line, 4,300 ft. SE line of Barnard Kiecamp Sur.
S.D. 4,106 ft.

F. Meyers' No. 1 Mooney, 260 ft. from road, 330 ft. from middle of SE cor. of 103-ac. tract, Seale Sur.
Rigging up.

Stanley Smith's No. 1 J. C. Copeland, about 4 miles SW of Lockhart and beyond the Mebane Estate.
Setting up machinery.

DUVAL COUNTY

Buffalo-Texas Syndicate's No. 1 Escobas, 2,777 ft. from N line, 1,944 ft. from W line of 950-ac. tract in San Francisco grant.
Drlg. 3,449 ft.

Eckert-Peacock et al's No. 1 C. W. Sutherland, 330 ft. N and W lines of SW NE of Sur. 188.
Drlg. 1,100 ft.

Grimes et al's No. 1 Fitzsimmons, 300 ft. S line and 150 ft. E line, Sur. 291.
S.D. 1,100 ft.

Humble O. & R. Co.'s No. 1 Mucio Vela, 330 ft. S and E lines of N½ of Sec. 42, T.T. Ry. Sur.
Location.

W. C. McBride's No. 1-A Hagist, 320 ft. from N and E lines of Blk. 2, Sec. 265.
Abd. 2,164 ft.

W. C. McBride's No. 2 Hagist, skidded rig from No. 1.
Drlg. 1,003 ft.

Stieren Oil Co.'s No. 1 J. P. Philp, 1,650 ft. S line, 990 ft. E line, Sur. 320.
Abd. 3,716 ft.

Texas Co.'s No. 2 Graham, 990 ft. SE line, 1,650 ft. SW line of Sur. 571.
Preparing to run D/S. test at 4,623 ft.

E. R. Thomas' No. 1 Parr, Sec. 26.
Derrick.

EDWARDS COUNTY

Will Olhausen's No. 1-B Turney, 660 ft. from W line, 1,622 ft. from N line, Sec. 176, C.C.S.D.&R.G.N.G. Sur.
S.D. 820 ft.

H. H. Sides' No. 1 Turney, C.C.S.D.&R.G.N.G. Sur. No. 164, 1,220 ft. N line and W line of survey.
Abd. 1,010 ft.

Harry Adams' No. 1 Holman, 1,650 ft. N line, 330 ft. from E line, Sec. 22, C.C.S.D.&R.G.N.G. Sur.
S.D. 602 ft.; showing oil at 520-25 ft. and trying to shut off wtr.

FAYETTE COUNTY

Clark et al's No. 1 Becker, in townsite of Roundtop.
Location.

Ross Fenton's No. 1 Kasper (262-ac.), 3,-

(Continued on Page 47)

Two Discoveries Reported in Andrews County; Gas Blowout in Reeves County Rank Wildcat

By L. E. BREDBERG
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Jan. 7.—The completion of two new discoveries, which will probably both be linked by production nearby, in Andrews County, and a gas blowout in a rank wildcat in Reeves County were the features of the Permian Basin during the week.

J. E. Cunningham's No. 1 Altman (Tillar), Section 1, B. C. Wyatt Survey, one-half mile north of Toyah, Reeves County, created considerable excitement when it struck an estimated 10,000,000 feet of gas at 3,673 feet in brown dolomite, above the Delaware lime, the heaviest gas volume ever registered in the county, in which several dry holes have been drilled, some of the tests logging good oil showings but not coming through as producers. The test blew for 48 hours, but was then killed with mud to allow deeper drilling. Elevation is 2,908 feet. The Rustler lime was topped at 1,420-85 feet. It also sprayed some water when allowed to blow.

The test is drilling for production in the Delaware lime, from which wells are producing in the Wheat Field, Loving County, approximately 28 miles north. There is one other test preparing to drill for the Delaware in Reeves County, to be drilled by the Herbert Oil Co. in the Williams and Walker lands, in Section 17, Block 6, H.&G.N. Survey, near the north line of the county and east of Pecos City.

Honolulu Oil Co. and Llano Oil Co. have completed No. 1 J. E. Parker, semi-wildcat producer in Section 7, Block A-44, P.S.L. Survey, approximately 5 miles southeast of the Deep Rock or Ogden area, Andrews County, for an initial production of 153 bbls. per day, pumping. It was drilled to a total depth of 4,780 feet, but was plugged back to 4,731 feet to shut off water before shooting with 260 quarts from 4,609-4,724 feet.

South of Ogden Pool

Humble Oil & Refining Co.'s No. 1 B. S. Walker, in Section 6, Block A-44 4½ miles west of the Parker discovery and 4 miles south of the Ogden Pool, has also opened another area or extended the producing area. Whether these two wells will be linked by other producers, or be connected to the Ogden and Ford areas remains to be seen. The Walker well made only 34 bbls. in three and one-half hours, but was completed as a flowing well. Total depth was 4,558 feet, but it was plugged back to 4,490 feet to shut off water and shoot. It was given a 540-quart shot from 4,270-4,480 feet before completing.

G. R. White's No. 1 fee, in the center of the NE of Section 2, M. Dewey Survey, 5½ miles west of Mercury, in northern McCulloch County, has been completed at a total depth of 670 feet, flowing 25 bbls. of 37 gravity oil per day, opening a new producing area, the first discovery in the area for several years. The sand pay was struck at 666 feet when the owners of the large ranch, reported around 20,000 acres, drilled for water. No company or operator has lease on any of the acreage surrounding the well, and it is not known whether the fee owners are to develop the field or lease the ranch.

Gulf Production Co. has completed No. 3 White and Baker in Section 4, Block 207, T.C. Railway Survey, west of the Yates Field, Pecos County, for a 27½-bbl. well, flowing and pumping for 24 hours. Total depth is 1,826 feet.

Jeffries and others' No. 1 Brown and Altman, in Section 6, Block B-5, wildcat on the sandy lime trend between the Halley and Howe discoveries, east of the Hendricks lime field, in Winkler County, is still fishing for a 6-inch liner. Total depth is 3,098 feet in saturated sand. The hole filled 800 feet with oil in three and one-half days, coming from 3,095 feet. The test appears as sure of making a producer when drilled deeper. Sun Oil Co. has staked location for No. 1 S. M. Halley, 1¾ miles northeast of the Skelly Oil Co.'s discovery in Section 25, Block B-11. The Sun location is in the NW Section 24, Block B-12.

Messenger and others have made location for a wildcat in Section 6, Block 9, H.&G.N. Survey, Pecos County, on land owned by Doctor Sibley of Fort Stockton.

Plug Ordovician Test

Humble Oil & Refining Co. is plugging No. 1 Ike Honig in Section 39, Block M, G.H.&S.A. Survey, Schleicher County, removing one Ordovician possibility. Total depth is 6,470 feet, 222 feet in the Ellenburger topped at 6,248 feet. This leaves one Ordovician test still drilling in this county and another about ready to spud.

Those interested in the unit test being drilled by John I. Moore and others on the McDowell ranch, in Section 22, Block 34, Township 2s, T.&P. Survey, Glasscock County, are to meet in Big Spring this week to determine whether to carry the test deeper. It is shut down at 8,501 feet. Elevation is 2,534 feet. Whether it reached the Ordovician lime is still undetermined.

Gulf Production Co. is swabbing No. 103 McElroy, in Section 197, Block F, western Upton County. This test has been standing shut down at 10,978 feet several weeks, the company starting operations again this week. Only a little over 36 bbls. of 40 gravity oil out of 365 bbls. of fluid was recovered in swabbing down to 7,500 feet, the fluid having accumulated in the hole. The casing pressure and tubing pressure have gradually been increasing. The oil is coming from a soft streak logged in the lime at 10,933-63 feet, the deepest showing found in Texas.

Dobbs Oil Co. of Dallas is to drill on the W. E. Friend ranch, in Section 3, William Allen Survey, 5 miles south of Big Lake in Reagan County. Empire Gas & Fuel Co. and Indian Territory Illuminating Oil Co. each have an interest in the block with Dobbs. Woodfield Drilling Co. of San Angelo has contract for carrying the test to 2,800 feet unless commercial production or sulphur water is logged.

There were 21 locations staked in the West Texas district. Twenty-three tests were completed, six dry and abandoned.

Phillips Petroleum Co. staked a location in Section 16, Block B-15, P.S.L. Survey, Ector County, approximately 1 mile northwest of the nearest production in the Penn Pool. Companies have been drilling more wells on the flanks and reaching out with other locations. In Brewster County, S. G. Smith is drilling a wildcat on the Decie ranch, in Section 7, Block 1. Four locations were staked in the northern part of Jones County.

WICHITA FALLS DISTRICT

There were 45 locations staked in the Wichita Falls and Ranger districts, the former getting 31. Thirty tests were completed, 12 dry.

W. B. Hamilton's No. 1 D. C. Giddings Estate, in the northwest corner of the A. McMillan Survey, Archer County, has logged the deepest showing of oil ever struck in the county. Sandy lime, carrying 38 degree gravity oil, was encountered from 5,154-64 feet, but the showing was passed up after 5⅞-inch casing was set at the latter depth. This casing is to be pulled and the saturated streak given a shot.

Hickock Producing & Development Co. of Cisco, which is supplying that town with natural gas, has received permit to erect a 10,000,000-foot capacity carbon black plant in Section 46, Block 4, H.& T.C. Survey, Eastland County. Consolidated Gasoline Co., a subsidiary of Hickok, has a casinghead gasoline plant operating south of Eastland and will supply 2,000,000 feet of gas per day.

Pipe line runs from the Wichita Falls district averaged 62,235 bbls. per day during the week.

PANHANDLE DISTRICT

Phillips Petroleum Co.'s No. 2 J. C. Wilson, in Section 157, Block T-3, T.& N.O. Survey, Moore County, drilled to 8,912 feet in search of deep production, but plugged back and a gas stratum shot with 200 quarts from 3,135-75 feet is yielding 45,000,000 feet after shooting.

The deep wildcat drilled by Humble Oil & Refining Co. on the Smith Land & Cattle Co. lands in Section 27, Block 9, H.&G.N. Survey, Childress County, has been ordered abandoned at 5,225 feet. It was drilled in quest of production in the Ordovician lime. No. 2 test is to be drilled 1½ miles south.

Collingsworth appears as another county in the Panhandle to break into the producing ranks as a result of Anderson and Kerr's No. 1 Gideon, in Section 6, Block 13, H.&G.N. Survey, 3 miles south of the Osborn Pool in east Wheeler County, having encountered an oil showing at 2,142 feet, with an increase at 2,170 feet, filling 500 feet with oil when shut down to move back boilers. It was bailed down and filled to 100 feet in 8 hours. It is drilling around 2,200 feet.

There were 19 locations staked in the Panhandle District while 12 tests were completed, all producing. One gas.

Wildcat Operations in West Texas

Week Ended January 4

ANDREWS COUNTY

Fuhrman Pet. Corp.'s No. 2-B Boner, 440 ft. from N and 1,320 ft. from E, Sec. 25, Blk. A-43.
Spudded.

Humble Oil & Ref. Co.'s No. 2 Means, 660 ft. from N and 1,980 ft. from W, Sec. 11, Blk. A-35.
Drlg. 4,419 ft.; small amount oil and gas showing.

Humble Oil & Ref. Co.'s No. 3 Means, 1,980 ft. from S and 3,300 ft. from W, Sec. 4, Blk. C-45.
Set csg. 1,899 ft.; T.D. 1,905 ft.

Humble Oil & Ref. Co.'s No. 3 Means, 660 ft. from N and 1,997 ft. from E, Sec. 9, Blk. A135.
Cellar.

Stogner et al's No. 1 Richardson, 1,980 ft. N and 660 ft. E, Sec. 4, Blk. A-37, P.S.L. Rig.

York & Harper's No. 1 Hereford Stock Farms, C Labour 12, League 315, Parmer Co. School Lands.
Drlg. 675 ft.

BREWSTER COUNTY

Joiner et al's No. 1 McIntyre, 363 ft. from S, 2,390 ft. from E of Sec. 31, Blk. 352, W. M. Mitchell Sur.
S.D. 2,100 ft.; rigging up rotary.

King & Franklin's No. 1 Gage Est., C Sec. 135, Blk. 22, G.H.&S.A. Sur.
S.D. 435 ft.

S. G. Smith's No. 1 Decie, 2,490 ft. from S and E, Sec. 7, Blk. 1.
Drlg. 325 ft.

COCHRAN COUNTY

Kelsey's No. 1 Slaughter, C Labour 36, League 150, R.C.S. Lands.
Location.

West Texas Development Co.'s No. 1 Slaughter, near C of Labour 53, League 149, Randall Co. School Lands.
Derrick.

CRANE COUNTY

Strauss' No. 1 Phelps et al, 2,113 ft. from N and 713 ft. from NW Sec. 13, Blk. 31, H.&T.C. Sur.
T.D. 223 ft.; ran. 10-in. csg.

Gulf Prod. Co.'s No. 1 Waddell, C NW NW Sec. 4, Blk. B-27, P.S.L. Sur.
Drlg. 350 ft.

Gulf Prod. Co.'s No. 9 Waddell, C of NE. Sec. 11, Blk. B-23, P.S.L. Sur.
Location.

Wahlenmaier Pet. Corp.'s No. 1 Kloh, 330 ft. from S and 1,608 ft. from W, Sec. 33, Blk. 42, Twp. 4s, T.&P. Sur.
Rigged up.

CROCKETT COUNTY

Leslie-Hiller et al's No. 1 Todd, 1,200 ft. N and 330 ft. E, Sec. 26, Blk. WX, G.C.& S.F. Sur.
Drlg. 420 ft.

Humble Oil & Ref. Co.'s No. 1 Couch, C NW Sec. 3, Blk. QR, G.C.&S.F. Sur.
Drlg. 840 ft.

CULBERSON COUNTY

Anderson-Pritchard Oil Corp., Magnolia Pet. Co. et al's No. 1 Borders, 1,255 ft. N and 2,305 ft. from W, Sec. 34, Blk. 69, P.S.L. Sur.
Straightening crooked hole 445 ft.

Miller Bros.' No. 1 fee, 1,980 ft. from N and 660 ft. from E line of Sec. 21, Blk. 97, P.S.L. Sur.
S.D. 2,145 ft.; show oil 2,107 ft.

Wood et al's No. 1 Hall, 250 ft. from S and 85 ft. from E, Sec. 11, Blk. 54¼, 16 miles N of Van Horn, P.S.L. Sur.
S.D. 246 ft.

DAWSON COUNTY

Ray Albaugh et al's No. 1 John Robinson, 1,320 ft. from N line, 1,320 ft. from W line of Sec. 46, Blk. M, E.L.R.R. Sur.
S.D. 3,300 ft.

ECTOR COUNTY

Amerada Pet. Co. et al's No. 1 Holt, 1,980 ft. from S and E, Sec. 36, Blk. A.
T.D. 4,040 ft.; set csg.

Atlantic Oil Prod. Co.'s No. 1 T. P. Land Trust, 440 ft. from N and W of SE Sec. 11, Blk. 42, Twp. 1s, T.&P. Sur.
Drlg. 1,410 ft.

G. Farley's No. 1 Connell, 990 ft. from S and 330 ft. from E, Sec. 11, Blk. B-16, P.S.L. Sur.
Cellar.

Gulf Prod. Co.'s No. 1 Goldsmith, C of NW, Sec. 16, Blk. 44, Twp. 1s, T.&P. Sur.
Rig.

Harrison et al's No. 3 Addis, 1,650 ft. from N line and 2,200 ft. from W line of Sec. 35, Blk. 43, Twp. 2s, T.&P. Sur.
T.D. 3,950 ft.; 11⅛ bbls. per hour; T.P. 3,865 ft.

(Continued on Page 46)

COMPLETIONS IN WEST TEXAS

Andrews County

Honolulu and Llano Oil Co.'s No. 1 J. E. Parker, total depth 4,780 feet, plugged back to 4,731 feet, elevation 3,194 feet, shot 260 quarts from 4,609-2,724 feet, initial production 153 bbls. per day pumping. Humble Oil & Refining Co.'s No. 1 B. S. Walker, total depth 4,558 feet, plugged back to 4,490 feet, top pay 4,340 feet, shot 540 quarts from 4,270-4,480 feet, initial production 34 bbls. in three and one-half hours flowing.

Coke County

W. M. Hooper's No. 1 Gaston, temporarily abandoned 2,560 feet.

Edwards County

Olhausen and Olhausen's No. 1 Turney, dry and abandoned 840 feet. Sides and others' No. 1 Turney, temporarily abandoned after spudding.

Ector County

Gulf Production Co.'s No. 6-A University, top pay 3,440 feet, total depth 3,700 feet, shot 345 quarts from 3,470-3,700 feet, initial production 254 bbls.

(Continued on Page 44)

● Oil men who make it their business to keep in touch with cementing progress will find unusual interest in the drawing at the right.

It illustrates the MULTIPLE STAGE CEMENTER —that Howco development which permits, in one continuous operation, the placing of two or more batches of cement at predetermined levels behind the casing.

Note that the lower stage of cement—providing the usual protection for the producing formation—passes through the Multiple Stage device without opening the cementing ports.

As the *second* stage of cement reaches the Multiple Stage device, the special plug uncovers the cementing ports, causing the cement slurry to pass out into the annular space adjacent to and above the device.

It will thus be seen that large amounts of cement may, with the Multiple Stage Cementer, be placed with half the pump pressure usually required, and with a drastic reduction in the period during which the cement is subject to the setting effect of time and temperature. Operators will be quick also to see the advantage of the Multiple Stage Cementer in "spotting" cement at upper levels behind the casing for the protection and conservation of productive formations.

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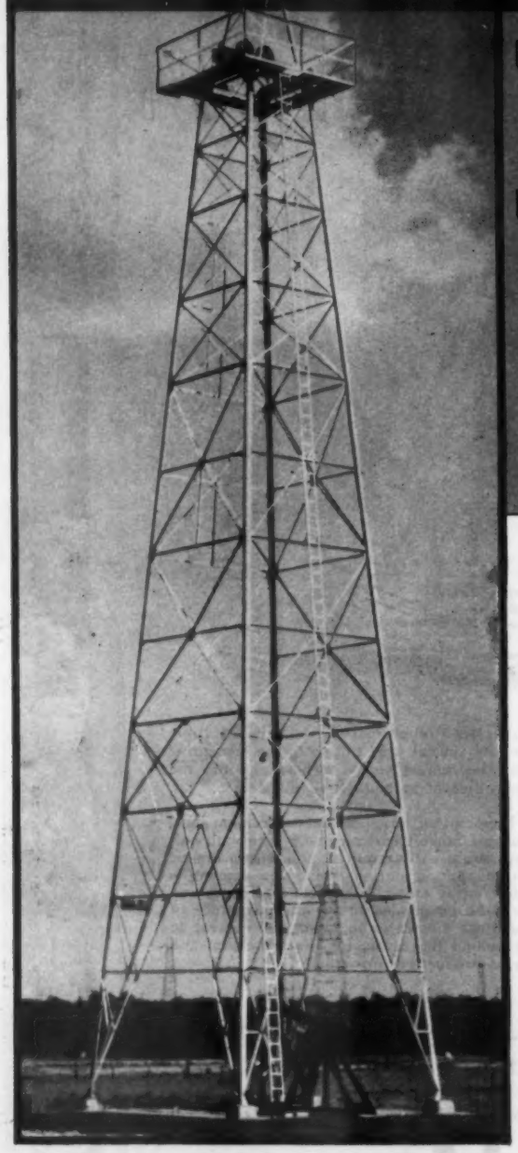

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Two Anderson County Wildcats Abandoned; Three Wildcats Staked in East Texas Area

By L. E. BREDBERG

DALLAS, Tex., Jan. 7.—During the past two weeks there have been two shallow wildcats abandoned in the Camp Hill area, 7 miles southeast of Palestine in Anderson County. These two tests, Dunn and others' No. 1 Cain and McDowell and others' No. 1 Camp, were drilled in quest of production from the Carrizo sand. The latter test had a good showing of oil in this sand, around 350 feet, but was given up at 387 feet after failing to materialize into a commercial producer. One other shallow test in the area was also abandoned some time back. Gulf Production Co.'s No. 1 Davey and Royall, in the M. Rogers Survey, led to the drilling of these three shallow tests because of it getting a good shallow showing of oil. However, it drilled through that shallow sand and failed to pick up production in the Woodbine sand. It is now coring below 5,750 feet, the company intending to carry it to the Georgetown lime for geological information.

Stone and others' abandoned their No. 1 Tullis in Cherokee County, at a total depth of 5,251 feet, while Hunt Production Co. abandoned its location on the Powell Lumber Co. tract in the D. W. McNab Survey, 1¼ miles northeast of the Rusk discovery of Wood and others on the New Birmingham Development Co.'s lands, in the same county.

Another possible producing area was marked off in Limestone County as a result of Stewart Brothers and Watson's No. 1 Wilson, in the Alex W. Patton Survey, 1½ miles southeast of Prairie Hill, proving dry at a total depth of 2,005 feet.

The Jamestown area of Upshur County registered another dry hole when J. K. Wadley's No. 3 Shuttlesworth drilled into salt water and was abandoned at a total depth of 3,737 feet. This area is just north of the East Texas Field.

Only three wildcat locations were reported within the past two weeks, Byrd and Frost of Dallas made location for a Woodbine sand test on the Pittsburgh National Bank land in the John Parker Survey, Upshur County, and is drilling at 2,090 feet. Abercrombie and Harrison are trying for production 8 miles north of Clarksville on the Roberts lands, in the John Ware Survey, Red River County, and Carter and others are to drill 2½ miles southwest of Mexia in Limestone County. Location is on the Dean tract in the P. Varella Survey.

Van Field

Three tests have been completed in the Van Field, Van Zandt County, one a dry hole on the Martin farm. It topped the sand at 3,164 feet and was drilled 18 feet. The Pure Oil Co. completed two of the tests. No. 3 Enas was completed for a 50-bbl. per day pumper at total depth of 2,982 feet. It topped the sand at 2,927 feet. The other producer, No. 2 Carter, produced 65 bbls. per hour. It was drilled by Pruitt and Graham on a vacancy strip northeast of the Van Joint Account. Total depth was 2,966 feet.

COMPLETIONS

Gregg County

Atlantic Oil Producing Co.'s No. 22 Turner, top sand 3,550 feet, total depth 3,617 feet, initial production 120 bbls. hour. B. F. Phillips' (was J. T. Brewer and others) No. 1 Bozeman, top sand 3,575 feet, total depth 3,620 feet, initial production 65 bbls. hour. Texas Co.'s (was Cal-Pet. Co.) No. 3 C. B. Johnson, top sand 3,568 feet, total depth 3,593 feet, initial production 35 bbls. 25 minutes. Fain-McGaha's No. 7 W. A. Bauknight, top 3,545 feet, total depth 3,606 feet, initial production 24 bbls. 15 minutes. Guiberson Oil Co.'s No. 8 F. J. Stuckey and others, top sand 3,575 feet, total depth 3,625 feet, initial production 60 bbls. 30 minutes. Gulf Production Co.'s No. 11 Bozeman, top sand 3,574 feet, total depth 3,620 feet, initial production 66 bbls. hour, 2-inch tubing; No. 23 Fishburn, top sand 3,535 feet, total depth 3,551 feet, initial production 60 bbls. hour; No. 33 M. O. Shepherd, top sand 3,486 feet, total depth 3,499 feet, initial production 70 bbls. hour; No. 18 T. B. Harris, top sand 3,509 feet, total depth 3,515 feet, initial production 75 bbls. hour; No. 22 Holland, top sand 3,564 feet, total depth 3,599 feet, initial production 104 bbls. hour. Magnolia Petroleum Co.'s No. 23 L. J. Everett, top sand 3,689 feet, total depth 3,693 feet, initial production 140 bbls. hour; No. 5 J. A. Parnell, top sand 3,575 feet, total depth 3,580 feet, initial production 140 bbls. hour. R. L. Miller's No. 4 F. Jones, top sand 3,550 feet, total depth 3,575 feet, initial production 35 bbls. 15 minutes. Red Irion Drilling Co.'s No. 1 J. M. Adams, top sand 3,467 feet, total depth 3,500 feet, shale, initial production swabbed 30 bbls. 24 hours. Reserve Dev. and others' No. 5 J. W. Fuller, top sand, 3,620 feet, total depth 3,635 feet, initial production 20 bbls. 20 minutes.

Roeser & Pendleton's No. 6 Rodden, top sand 3,576-94 feet, total depth 3,595 feet, initial production 65 bbls. hour; No. A-8 Satterwhite heirs, top sand 3,660-72 feet, total depth 3,674 feet, shale, initial production 26 bbls. 26 minutes, 2-inch tubing. Shasta Oil Co.'s No. A-3 E. G. Richey, top sand 3,530 feet, total depth 3,568 feet, initial production 34 bbls. 30 minutes. Shell Petroleum Corp.'s No. 9. J. W. Aiken, top sand 3,541-3,621 feet, total depth 3,621 feet, initial production 40 bbls. 30 minutes; No. 10 J. W. Aiken, top sand 3,579-3,635 feet, total depth 3,645 feet, initial production 20 bbls. 16 minutes; No. 11 J. W. Aiken, top sand 3,578-3,639 feet, total depth 3,649 feet, initial production 20 bbls. 15 minutes; No. 1 E. Cabinall, top sand 3,573-3,604 feet, total depth 3,620 feet, lime, initial production 7½ bbls. hour. Tide Water Oil Co.'s No. 12 W. E. Jones, top sand 3,602 feet, total depth 3,630 feet, initial production 11 bbls. 10 minutes. Yount Lee's No. A-12 Davis, top sand 3,563 feet, total depth 3,580 feet, initial production 35 bbls. hour, eleven-sixteenths inch choke; No. B-5 Whatley, top sand 3,501-3,508 feet, total depth 3,510 feet, initial production 35 bbls. hour, eleven-sixteenths inch choke.

Atlantic Oil Producing Co.'s No. 2 Ella Hagler, top sand 3,595 feet, total depth 3,613 feet, initial production 152 bbls. hour, 2½-inch tubing; No. A-13 M. B. Hughey, top sand 3,572 feet. total depth 3,612 feet, initial production 100 bbls. hour. Carroll and others' No. 1 Mrs. A. Barker, top sand 3,542 feet, total depth 3,557 feet, initial production 26 bbls. 2 hours swabbing. D & G Oil Co.'s No. 1 Crews, top sand 3,672 feet, total depth 3,676 feet, initial production 40 bbls. 24 hours by heads.

Gulf Production Co.'s No. 32 Brown, top sand 3,567 feet, total depth 3,582 feet, initial production 72 bbls. hour; No. 36 Brown, top sand 3,537 feet, total depth 3,559 feet, initial production 64 bbls. hour; No. 37 Brown, top sand 3,567 feet, total depth 3,587 feet, initial production 60 bbls. hour; No. 64 S. Hilburn, top sand 3,558 feet, total depth 3,588 feet, initial production 75 bbls. hour; No. 19 Muckleroy, top sand 3,566 feet, total depth 3,584 feet, initial production 60 bbls. hour. T. D. Humphrey's No. 1 C. C. Crews, top sand 3,673-80 feet, total depth 3,679 feet, initial production 30 bbls. 24 hours by heads. Invincible Oil Co.'s No. 1 F. Elder, Jr., top sand 3,640 feet, total depth 3,653 feet, initial production 135 bbls. hour. Iowa-Payne's No. 4 Walker, top sand 3,650 feet, total depth 3,652 feet, initial production 25 bbls. hour, three-quarters inch choke.

McAlister Oil Co.'s No. W-3 Sabine River, top sand 3,596 feet, total depth 3,579 feet, inititat production 15 bbls. 10 minutes; No. X-3 Sabine River, top sand 3,596 feet, total depth 3,599 feet, initial production 15 bbls. 20 minutes; No. Y-3 Sabine River, top sand 3,592 feet, total depth 3,596 feet, initial production 60 bbls. hour. Magnolia Petroleum Co.'s No. 8 M. T. Cole, top sand 3,582 feet, total depth 3,584 feet, initial production 104 bbls. hour. A. D. Robinson's No. 3 J. Elder, top sand 3,507 feet, total depth 3,550 feet, initial production 120 bbls. hour. Shell Petroleum Corp.'s No. 24 W. W. Elder, top sand 3,540 feet, total depth 3,600 feet, initial production 27 bbls. 30 minutes; No. B-10 J. S. Elder, top sand 3,541 feet, total depth 3,576 feet, initial production 44 bbls. 30 minutes. Sinclair Prairie's No. B-7 King Tract No. 3, top sand 3,438 feet, total depth 3,458 feet, initial production 28 bbls. 15 minutes; No. A-17 A. A. King Tract No. 5, top sand 3,434-54 feet, total depth 3,472 feet, initial production 31 bbls. 15 minutes; No. 16 Lawther, top sand 3,520-35 feet, top Geo. lime 3,575 feet, total depth 3,577 feet, initial production 22 bbls. 5 hours, swabbing. Sun Oil Co.'s No. 1 W. B. Walker, top sand 3,586 feet, total depth 3,592 feet, initial production 40 bbls. hour. Texas Co.'s No. 10 W. Baxter, top sand 3,645 feet, total depth 3,673 feet, initial production 64 bbls. hour; No. 11 J. M. Dickson, top sand 3,543 feet, total depth 3,605 feet, initial production 35 bbls. 30 minutes; No. 23 Elder, top sand 3,606 feet, total depth 3,636 feet, initial production 68 bbls. hour, 2-inch tubing. F. L. Thompson's No. 5 O. Hilburn, top sand 3,656 feet, total depth 3,659 feet, initial production 120 bbls. hour. Tide Water Oil Co.'s No. 22 E. R. Bivens, top sand 3,640 feet, total depth 3,649 feet, initial production 8 bbls. 10 minutes. Trentman Oil Co.'s No. 1 Presbyterian Church, top stand 3,541 feet, total depth 3,560 feet, shale, initial production 20 bbls. hour on air lift. Thurman-Lipscomb's No. 2 R. L. Martin, top sand 3,642 feet, total depth 3,644 feet, initial production 100 bbls. hour.

Rusk County

Meco's (formerly Coffman-Futch Oil Co.) No. 4 F. Cooper, top sand 3,684 feet, total depth 3,685 feet, initial production 50 bbls. hour, 2½-inch tubing. P. G. Reed's (formerly C. M. Cope) No. A-1 F. A. Taylor, top sand 3,538 feet, total depth 3,572 feet, inititat production 10 bbls. hour by heads, 2-inch tubing. Everets Drlg. Co.'s No. A-6 H. F. Crews, top sand 3,819 feet, total depth 3,820 feet, initial production 50 bbls. 30 minutes. Gulf Producing Co.'s No. 4 Will Oten, top sand 3,570 feet, total depth 3,660 feet, shale, initial production 30 bbls. hour, three-quarters inch choke. Humble Oil & Refining Co.'s No. 140 Crim, top sand 3,592 feet, total depth 3,602 feet, initial production 85 bbls. hour; No. 142 Crim, top sand 3,590 feet, total depth 3,601 feet, initial production 82 bbls. hour; No. 143 Crim, top sand 3,583 feet, total depth 3,597 feet, initial production 88 bbls. hour; No. 144 Crim, top sand 3,628 feet, total depth 3,652 feet, initial production 102 bbls. hour; No. 146 Crim, top sand 3,618 feet, total depth 3,658 feet, initial production 120 bbls. hour; No. 150 Crim, top sand 3,564 feet, total depth 3,617 feet, initial production 80 bbls. hour; No. 153 Crim, top sand 3,585 feet, total depth 3,598 feet, initial production 88 bbls. hour; No. 9 R. H. and W. L. Laird, top sand 3,608 feet, total depth 3,628 feet, initial production 25 bbls. 20 minutes. S. S. Laird's No. 8 J. N. Peterson, top sand 3,599 feet, total depth 3,623 feet, initial production 100 bbls. hour.

Magnolia Petroleum Co.'s No. 9 Nat Bean, top sand 3,518 feet, total depth 3,588 feet, initial production 5 bbls. in 15 minutes through 1-inch choke; No. 15 W. P. Moore, top sand 3,684 feet, total depth 3,700 feet, initial production 19 bbls. in five minutes. Navarro Oil Co.'s No. 8 J. N. Peterson, top sand 3,640 feet, total depth 3,674 feet, initial production 140 bbls. per hour. Sinclair Prairie's No. 10-B Kennedy, top sand

East Central Texas Wildcats

Week Ending January 5

ANDERSON COUNTY

Gulf Prod. Co.'s No. 1 Dovey & Royall, 330 ft. from NE and NW of 172-ac. tract, M. Rogers Sur.
T.D. 5,712 ft.; reaming to bottom.

J. W. Lutter' No. 1 C. McKee, 2,640 ft. from N line of lease and survey and 330 ft. from W line of McKey 800-ac. tract.
Derrick.

Tide Water Oil Co. et al's No. 21-A Wells, 4,079 ft. N and 2,333 ft. W of lease, S. Edmondson Sur. (Trinity test).
Derrick.

BOWIE COUNTY

Tex-Ark. Oil Co.'s No. 1 Hamilton Estate, 600 ft. E and 350 ft. N lines, J. Milan Sur., 4 miles S of Red River.
Rigged up.

CHEROKEE COUNTY

J. B. Daniels' No. 1 Southern Pine Lbr. Co., 4,000 ft. N and 150 ft. W of SE cor. of Thompson Sur.
T.D. 2,442 ft.; skidded derrick.

Jacksonville O. & G. Co.'s No. 1 H. D. Henderson, 660 ft. from N and W lines of 40-ac. tract out of Tankersley 104-ac. tract, 5 miles NE of Jacksonville on W side of railroad, J. Pineda Sur.
T.D. 752 ft.

E. M. Thomason et al's No. 1 Addis Estate, 250 ft. S of survey and 150 ft. E of railroad, J. T. Jones Sur., 6 miles NW Alto.
S.D. 2,150 ft.

Wilson Stubbs Oil Co.'s No. 1 Rowborts, 450 ft. from S line, 150 ft. from W line of 100-ac. tract, 2 miles SW of Jacksonville, J. D. Wolfin Sur.
S.D. 1,550 ft.

ELLIS COUNTY

Beckner-Finley et al's No. 1 Coker, 2,900 varas along S line of grant from river and 1,700 varas N at R/A, R. De La Pena Sur.
S.D. 527 ft.

FREESTONE COUNTY

Burris' No. 1 R. J. Johnson, NE cor. of a 95.5-ac. tract, W. M. C. Jones Sur.
S.D. 1,000 ft.
Hailey-Young's No. 1 Cochran, 400 ft. N and W lines, D. Bullock Sur., 1 mile SE of Lima.
Location.

GREGG COUNTY

O. T. Clark's No. 1 Williams, 2,100 ft. from S and 2,400 ft. from W of D. Hill Sur., 3 miles NE of Longview.
Fishing 2,730 ft.

Tuberville et al's No. 1 Ivy, 2,004 ft. S and 606 ft. E of P. B. Hardy Sur., 7 miles SE of Fairfield.
Material.

HARRISON COUNTY

W. G. Boyd et al's No. 1 W. L. Rudd, no

(Continued on Page 47)

3,600 feet, total depth 3,663 feet in shale, initial production 30 bbls. in three hours swabbing through 2½-inch tubing. Tide Water's No. 11 N. Bean, top sand 3,563 feet, total depth 3,630 feet, initial production 10 bbls. in 10 minutes through 1-inch choke; No. 11 W. P. Moore, top sand 3,683 feet, total depth 3,690 feet, initial production 30 bbls. in 15 minutes. Ward Oil Co.'s No. 7 J. R. Beall, top sand 3,710 feet, total depth 3,702 feet, initial production 35 bbls. per hour. Wheelock & Collins' No. 17 Wells, top sand 3,679 feet, total depth 3,703 feet, initial production 25 bbls. per hour. Chester Wynne's No. 1 T. H. Gill, top sand 3,600 feet, total depth 3,606 feet, initial production 65 bbls. per hour through three-quarters inch choke. Agey Drilling Co.'s No. 1 J. H. Propes, top sand 3,638 feet, total depth 3,620 feet in shale, initial production 23 bbls. per hour swabbing.

Atlantic Oil Producing Co.'s No. 8 M. L. Thompson, top sand 3,670 feet, total depth 3,695 feet, initial production 125 bbls. per hour through 2½-inch tubing; No. 9 M. L. Thompson, top sand 3,697 feet, total depth 3,730 feet, initial production 128 bbls. per hour through 2½-inch tubing. E. V. Ball Oil Co.'s No. 2 D. Bradford, top sand 3,603 feet, total depth 3,698 feet in shale, initial production 60 bbls. per hour. J. B. Bond Corp.'s No. 4 D. Bradford, top sand 3,537-43 feet, total depth 3,607 feet in shale, initial production 20 bbls. in three hours pumping. Crabtree & Jeffries' No. 6 C. C. Giles, top sand 3,712 feet, total depth 3,732 feet in shale, initial production 100 bbls. in two hours through 2-inch tubing. Dearing & Son's No. 3 E. L. Pinkston, top sand 3,527 feet, total depth 3,580 feet in shale, initial production 20 bbls. in three hours pumping. R. W. Fair's No. 9 fee, top sand 3,638 feet, total depth 3,648 feet, initial production 165 bbls. per hour through 2½-inch tubing. G. B. R. Oil Co.'s No. 9 L. Harmon, top sand 3,780 feet, total depth 3,728 feet, initial production 75 bbls. per hour.

Gulf Production Co.'s No. 10-B Ida Holt, top sand 3,750 feet, total depth 3,756 feet, initial production 89 bbls. per hour through three-quarters inch choke; No. 7-A Rayford, top sand 3,786 feet, total depth 3,791 feet, initial production 21 bbls. in 20 minutes; No. 14 J. W. Shaw, top sand 3,769 feet, total depth 3,774 feet, initial production 60 bbls. per hour through thret-quarters inch choke; No. 32 Turner, top sand 3,727 feet, total depth 3,733 feet, initial production 58 bbls. per hour through three-quarters inch choke. H. B. W. Oil Co.'s No. 1 J. H. Henson, top sand 3,525 feet, total depth 3,582 feet in shale, initial production 20 bbls. in two hours pumping; No. 5 R. Redwine, top sand 3,553 feet, total depth 3,576 feet in shale, initial production 20 bbls. in two hours pumping.

Humble Oil & Refining Co.'s No. 7-B Barksdale, top sand 3,528 feet, total depth 3,603 feet in shale, initial production 21 bbls. per hour through 1-inch choke on gas life; No. 7 L. Barton, top sand 3,752 feet, total depth 3,781 feet, initial production 68 bbls. per hour through three-quarters inch choke; No. 37 Blackwell, top sand 3,680 feet, total depth 3,694 feet, initial production 91 bbls. per hour; No. 8 Sol Dennis, top sand 3,760-82 feet, total depth 3,797 feet in shale, initial production 95 bbls. per hour; No. 6 L. Hill, top sand 3,700 feet, total depth 3,720 feet, initial production 90 bbls. per hour through 2-inch choke; No. 12 W. B. Key, top sand 3,713 feet, total depth 3,727 feet, initial production 74 bbls. per hour through three-quarters inch choke; No. 6 A. Wilson, top sand 3,698 feet, total depth 3,718 feet in shale, initial production 130 bbls. per hour. Hunt Production Co.'s No. 4 R. Pool, top sand 3,763 feet, total depth 3,800 feet, initial production 23 bbls. in 20 minutes through three-quarters inch choke; No. 1-B S. Wilson, top sand 3,764 feet, total depth 3,784 feet, initial production 34 bbls. in 30 minutes. K. & P. Oil Co.'s No. 2 E. B. Alford, top sand 3,595 feet, total depth 3,698 feet in shale, initial production 20 bbls. in 45 minutes through 2-inch tubing. Marathon Oil Co.'s No. 12 Clay heirs, top sand 3,585 feet, total depth 3,695 feet, initial production 20 bbls. per hour swabbing; No. 6 Kangerga (2), top sand 3,600 feet, total depth 3,652 feet, initial production 78 bbls. per hour; No. 17 Ledbetter, top sand 3,640 feet, total depth 3,659 feet, initial production 80 bbls. per hour; No. 20 E. E. Moore, top sand 3,599 feet, total depth 3,673 feet, initial production 32 bbls. per hour. R. M. Nathan's No. 5 R. Redwine, top sand 3,540 feet, total depth 3,620 feet, initial production 20 bbls. per hour swabbing. Octo Oil Co.'s No. 5-A W. H. Frederick, top sand 3,540 feet, total depth 3,673 feet in shale, initial production 20 bbls. in three hours pumping. Perry-Woody and others' No. 8 A. Thrash, top sand 3,632 feet, total depth 3,685 feet, initial production 75 bbls. per hour. Yandle Rogers' No. 3 Towns heirs, top sand 3,714 feet, total depth 3,803 feet, initial production 60 bbls. per hour. Salmon-Carter's No. 1 Hughes heirs, top sand 3,512 feet, total depth 3,620 feet, initial production 20 bbls. in 30 minutes swabbing.

Sinclair Prairie's No. 14-B P. Tipps, top sand 3,616 feet, total depth 3,619 feet, initial production 23 bbls. in 15 minutes through 2½-inch tubing. Stanolind and Pure's No. 45 Siler, top sand 3,602 feet, total depth 3,620 feet, initial production 20 bbls. in 25 minutes. Sun Oil Co.'s No. 9 Alf Lee, top sand 3,618 feet, total depth 3,623 feet, initial production 44 bbls. per hour. Texas Co.'s No. 16-A Jarvis, top sand 3,613 feet, total depth 3,625 feet, initial production 25 bbls. in 25 minutes; No. 17-A A. S. Jarvis, top sand 3,622 feet, total depth 3,635 feet, initial production 24 bbls. in 30 minutes through 2-inch tubing. Tide Water's No. 16 L. J. Pinkston, top sand 3,765-95 feet, total depth 3,798 feet in shale, initial production 20 bbls. in 15 minutes through 1-inch choke. Trico Oil Co.'s No. 4 Motley, top sand 3,756 feet, total depth 3,761 feet, initial production 23 bbls. in 15 minutes. Turman Oil Co.'s No. 9 Kangerga, top sand 3,639 feet, total depth 3,655 feet, initial produition 31 bbls. in 15 minutes.

Smith County

Arcadia Refining Co.'s No. 8-A J. R. Green, top sand 3,778 feet, total depth 3,781 feet, initial production 25 bbls. in 30 minutes. Byars and others' No. 1 Lula Jackson, top sand 3,812 feet, total depth 3,814 feet, initial production 4 bbls. in 10 minutes. Crone & Gracey's No. 4 A. S. Jarvis, top sand 3,686 feet, total depth 3,688 feet, initial production 60 bbls. per hour. Johnson Owens, trustee's No. 6 P. Jackson, top sand 3,740 feet, total depth 3,741 feet, initial production 75 bbls. per hour. T. W. Medlen's No. 1 Mayfield Co., Top sand 3,782 feet, total depth 3,784 feet, initial production 108 bbls. per hour. Sun Oil Co.'s No. 8 J. A. Layne, top sand 3,648 feet, total depth 3,650 feet, initial production 30 bbls. in 30 minutes. Tex-Gulf Co.'s No. 2 Hodnott-Melton, top sand 3,679 feet, total depth 3,683 feet, initial production 26 bbls. in 20 minutes; No. 3 Hodnott-Melton, top sand 3,669 feet, total depth 3,673 feet, initial production 75 bbls. per hour.

Upshur County

Cal-Pet Co.'s No. 4 Glenn, location abandoned; No. 12 Walker, location abandoned. Chatam Oil Co.'s No. 6 Fenton, top sand 3,741 feet, total depth 3,742 feet, initial production 28 bbls. in 30 minutes. E. & D. Oil Co.'s No. 9 T. Wells, top sand 3,685 feet, broken sand 3,678 feet, total depth 3,691 feet, initial production 15 bbls. in 15 minutes through 2-inch tubing. Eastern Tex Petroleum Co.'s No. 18 T. J. Dunbar, top sand 3,638 feet, total depth 3,662 feet in shale, initial production 23 bbls. in three hours pumping. Simms and Stanolind's No. 32-B Flewellen, top sand 3,782 feet, total depth 3,788 feet, initial production 32 bbls. in 30 minutes. Steen Drilling Co.'s No. 8 J. Phillips, top sand 3,680 feet, total depth 3,694 feet, initial production 40 bbls. per hour. Sun Oil Co.'s No. 2 E. F. Johnson, top sand 3,613 feet, total depth 3,620 feet, initial production 19 bbls. in five hours swabbing.

COMPLETIONS IN EAST TEXAS

Anderson County

Dunn and others' No. 1 Cain, abandoned 351 feet. McDowell and others' No. 1 Camp, dry and abandoned 387 feet. Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 4 Ware, top sand 4,067 feet, total depth 4,094 feet, initial production 5 bbls. per hour through one-half inch choke; No. 12-A Wills, completed as large gas well without any gauge or estimate, total depth 4,086 feet. Trinity State Oil Co.'s No. 1 Trinity River Bed, total depth 4,016 feet, initial production 220 bbls. in 24 hours through one-quarter inch choke.

Cherokee County

Hunt Production Co.'s No. 1 Powell Lumber Co., location abandoned. E. L. Stone's No. 1 Tullis, dry and abandoned 5,251 feet.

Hunt County

J. C. Hall's No. 1 Parrish, location abandoned. Winans' No. 1 Phillips, abandoned at 40 feet.

Leon County

Normangee Oil Co.'s No. 1 Henry, dry and abandoned 2,775 feet.

Limestone County

Stewart Brothers and Watson's No. 1 Wilson, dry and abandoned 2,005 feet.

Rains County

Wadley and others' No. 1 Jones, dry and abandoned 4,632 feet.

Upshur County

Wadley and others' No. 3 Shuttlesworth, dry and abandoned 3,737 feet.

Van Zandt County

Pruitt and Graham's No. 2 Carter, top sand 2,910 feet, total depth 2,966 feet, initial production 65 bbls. per hour. Pure Oil Co.'s No. 5 Martin, dry and abandoned 3,182 feet; No. 3 Enas, top sand 2,927 feet, total depth 2,982 feet, initial production 50 bbls. per day.

West Texas Fields

(Continued from Page 40)

Sunray and Llano Oil Co.'s No. 2 Jones, top pay 3,632 feet, total depth 3,685 feet, shot 180 quarts from 3,625-85 feet, initial production 542 bbls.

Howard County

Sinclair Prairie Oil Co.'s No. 2 Jones, total depth 2,875 feet, initial production 150 bbls. California Co.'s No. 3 Bell, total depth 2,878 feet, plugged back to 2,792 feet, shot 300 quarts from 2,600-2,780 feet, initial production 256 bbls. Sinclair Prairie Oil Co.'s No. 2-B Davis, top pay 2,695 feet, total depth 2,830 feet, shot 200 quarts from 2,830-2,530 feet, initial production 305 bbls. Mixon and others' No. 1 Capps-Lucas, dry and abandoned 3,085 feet. Eastland Oil Co.'s No. 4 Chalk, top pay 1,710 feet, total depth 1,830 feet, initial production 63 bbls.

Irion County

Johnson's No. 2 Tankersley, dry and abandoned 1,260 feet.

Pecos County

California Co.'s No. 3 Reed, top pay 1,238 feet, total depth 1,400 feet, initial production 6,227 bbls. per hour.

Runnels County

Daniels and others' No. 1 Jane, dry and abandoned 2,664 feet. Petroleum Interests' No. 3-B Brevard, top pay 2,500 feet, total depth 2,510 feet, initial production 70 bbls.

Upton County

Stanolind Oil & Gas Co.'s No. 35 Burleson, total depth 2,033 feet, initial production 154 bbls. per day pumping.

Ward County

Leidecker and others' No. 3 Bennett, top pay 2,332 ft.; total depth 2,543 ft.; initial production 420 bbls. Tex-Mex Petroleum Corp.'s No. 1 Pure-Bray, dry and abandoned 2,939 ft. Atlantic Oil Producing Co.'s No. 1 Miller, top pay 2,389 ft.; total depth 2,430 ft.; shot 100 quarts from 2,375-2,415 ft.; initial production 60 bbls. Richardson's No. 13-B Johnson, top pay 2,402 ft.; total depth 2,590 ft.; initial production 567 bbls.

Winkler County

Empire Gas & Fuel Co.'s No. 2 Scarborough, top pay 2,980 ft.; total depth 3,100 ft.; shot 120 quarts from 2,880-3,020 ft.; initial production 318 bbls. Colonial Oil Co.'s No. 2 Scarborough, top pay 2,890 ft.; total depth 3,077 ft.; initial production 112 bbls.

COMPLETIONS IN PANHANDLE DISTRICT

Gray County

Danciger Oil & Refining Co.'s No. 4 Barret, top pay 3,217 ft.; total depth 3,305 ft.; shot 240 quarts from 3,205-46 ft.; initial production 525 bbls. Danciger Oil & Refining Co.'s No. 2 Webb, top pay 2,475 ft.; total depth 2,632 ft.; shot 100 quarts from 2,474-2,501 ft.; plugged back to 2,504 ft.; initial production 20 bbls. Humble Oil & Refining Co.'s No. 3 Palmer, top pay 3,055 ft.; total depth 3,085 ft.; initial production 341 bbls. Irish American Oil Co.'s No. 1 Morse, top pay 2,445 ft.; total depth 2,736 ft.; initial production 20 bbls. Magnolia Petroleum Co.'s No. 4 Heaston, total depth 3,195 ft.; shot 150 quarts from 3,135-80 ft.; initial production 170 bbls. day; pumping.

Hutchinson County

Gulf Production Co.'s No. 50 Dial, top pay 2,970 ft.; total depth 3,076 ft.; shot 250 quarts from 2,970-3,057 ft.; initial production 148 bbls. day; pumping. Wasson Trustee's No. 3 Watkins, top pay 3,015 ft.; total depth 3,028 ft.; shot 410 quarts from 2,940-3,028 ft.; initial production 243 bbls. day, pumping.

Wheeler County

Burch's No. 2 Plummer, top pay 2,438 ft.; total depth 2,500 ft.; initial production 75 bbls.. Elbar Corp.'s No. 5 Noel, total depth 2,486 ft.; initial production 172 bbls. day; pumping. Dyke Oil Co.'s No. 1 Sitter, top pay 2,020 ft.; total depth 2,235 ft.; initial production 23,300,000 feet of gas. Ohio Fuel Oil Co.'s No. 5 D'Spain, top pay 2,403 ft.; total depth 2,500 ft.; initial production 186 bbls. day; pumping. Skelly Oil Co.'s No. 9 Derrick, top pay 2,386 ft.; total depth 2,515 ft.; initial production 656 bbls. day, pumping.

COMPLETIONS IN NORTH CENTRAL TEXAS

Archer County

Hamilton's No. 13 Cartwright, top pay 1,136 feet, total depth 1,145 feet, initial production 85 bbls.; No. 6 Abercrombie, top pay 1,168 feet, total depth 1,178 feet, initial production 75 bbls. Gray Drilling Co.'s No. 1 Ferguson, top pay 534 feet, total depth 546 feet, initial production 10 bbls. Kleiner's No. 2 Andrews, top pay 967 feet, total depth 985 feet, initial production 10 bbls. Bonner Oil Co.'s No. 4-B Abercrombie, dry and abandoned 1,251 feet. Continental Oil Co.'s No. 1 Henry, dry and abandoned 1,180 feet. Fain & McGaha's No. 5-A fee, dry and abandoned 739 feet; No. 23 Green, top pay 1,201 feet, total depth 1,216 feet, initial production 300 bbls. Petroleum Producers Co.'s No. 9 Harmonson, top pay 952 feet, total depth 967 feet, initial production 50 bbls.; No. 6-B Richardson, top pay 1,256 feet, total depth 1,268 feet, initial production 75 bbls. Shira's No. 1 Gatright, dry and abandoned 936 feet.

Jack County

Wolfe's No. 1 Henderson, dry and abandoned 608 feet.

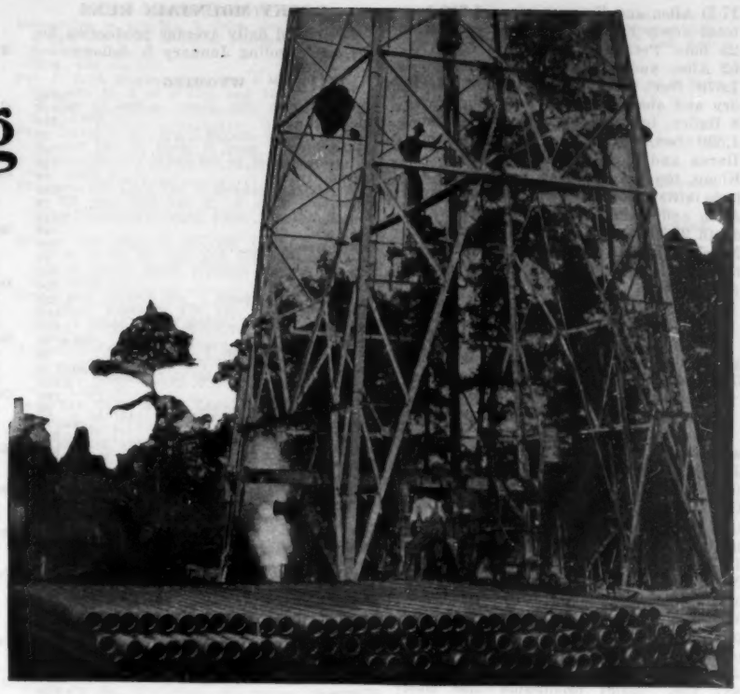
Montague County

Lesh and McCall's No. 1 Davenport, top pay 1,700 feet, total depth 1,709 feet, initial production 20 bbls. per hour.

Wichita County

Burns' No. 40 Beach, dry and abandoned 536 feet. Burns and Long's No.

Seeing is Believing when it comes to Pipe



BONA FIDE evidence from the field is the last word when it comes to proving pipe superiority. The photograph shown here pictures current drilling operations where Chester Steel Casing is being run in—and in the words of the superintendent, "Everything is hunky-dory."

Rigid inspections of Chester Steel Casing, before shipping guarantee the highest standards of quality and workmanship—adequate stocks at strategic warehousing points mean that you get the pipe you want when you want it.

Try CHESTER—*it means the end of your pipe worries.*

Chester also makes "Wrought Iron" pipe—manufactured from genuine old-fashioned hand puddled muck bar made in our own mills from 100 per cent pig iron.

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H. A. Morse: 30 Church St., New York, N. Y.

J. P. Cooney: 715-716 A. G. Bartlett Bldg., Los Angeles, Calif.

J. P. Steele: 603 Petroleum Bldg., Ft. Worth, Texas.

District Offices

J. D. Swartz: 1231 S. Evanston St., Tulsa, Oklahoma.

E. L. Moseley: 2218 Mills St., Houston, Texas.

Burt S. Shafer, Southwest Representative: 4313 Fairfax Ave., Dallas, Texas, or 603 Petroleum Bldg., Ft. Worth, Texas.

District Warehouses

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United Pipe & Supply Corp., Charleston, Danville, West Hamlin, W. Va.: Paintsville, Ashland, Allen, Prestonburg, Ky.

Prichard Supply Co., Mannington, W. Va.: Mather and Waynesburg, Pa.

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Kane Supply Company, Kane, Lawrenceville, Brookville, Pa.

Bovaird & Co., Bradford, Pa.

Western Supply Co., Tulsa, and Oklahoma City, Okla.: Dallas, Houston, Pampa and Willow Springs, Texas.

Star Drilling Machine Co., 550 Clinton St., Portland, Ore., and Akron, Ohio.

Stephen H. McCabe, 508 4th St., San Francisco, Calif.

Barde Steel Company, Seattle, Wash., and Portland, Ore.

Louisiana Supply Co., Sulphur, La., and Brimstone, La.

Dunigan Tool and Supply Co., Main office, Breckenridge, Texas. Branch Stores, Willow Springs, Pampa, Turnertown, and McCamey, Texas, and Hobbs, N. M.

Okmulgee Supply Corp., Okmulgee, Okla.

Oil Field Equipment Co., San Antonio, Texas.

CHESTER

STEEL CASING AND LINE PIPE

17-D Allen and Kemp, top pay 1,310 feet, total depth 1,324 feet, initial production 25 bbls. Petroleum Producers Co.'s No. 62 Allen and Kemp, dry and abandoned 1,670 feet; No. 65 Allen and Kemp, dry and abandoned 554 feet. Burns' No. 8 Bailey, top pay 1,324 feet, total depth 1,330 feet, initial production 10 bbls. Burns and Long's No. 20-D Allen and Kemp, top pay 463 feet, total depth 469 feet, initial production 10 bbls.; No. 21-D Allen and Kemp, top pay 216 feet, total depth 226 feet, initial production 2 bbls.; No. 19-D Allen and Kemp, top pay 214 feet, total depth 224 feet, initial production 2 bbls.

Wilbarger County

Phillips Petroleum Co.'s No. 4-I Waggoner, top pay 2,558 feet, total depth 2,564 feet, initial production 29 bbls.

Young County

Bonner Oil Co.'s No. 5 Jones, dry and abandoned 600 feet. Jeffery's No. 2 Jeffery, top pay 850 feet, total depth 866 feet, initial production 5 bbls. Knight Oil Corp. and others' No. 7 Hamilton, top pay 850 feet, total depth 883 feet, initial production 350 bbls. Krause's No. 1 Ellis, dry and abandoned 553 feet. Nash and Windfohr's No. 1 Graham, dry and abandoned 2,831 feet. Brazelton Brothers and others' No. 3 Ward, top pay 598 feet, total depth 608 feet, initial production 75 bbls. Cato and others' No. 2 Hamilton, top pay 857 feet, total depth 887 feet, initial production 250 bbls. Owen Oil Co.'s No. 1 Prideau, dry and abandoned 600 feet.

COMPLETIONS, RANGER DISTRICT

Brown County

Sher-Ritt Oil Corp.'s No. 1-B Leatherwood, total depth 1,210 feet; initial production 35 bbls.

Callahan County

Jackson's No. 1 Black, temporarily abandoned 900 feet. Kennedy & King's No. 1 Berry, dry and abandoned 1,030 feet. Sample's No. 7 Finley, dry and abandoned at 575 feet.

Coleman County

Anzac Oil Corp.'s No. 1 Morris, top pay 2,234 feet, total depth 2,252 feet, initial production 7,500,000 feet of gas. Groves and others' No. 1 Morris, temporarily abandoned at 3,190 feet.

Eastland County

Moore's No. 1 Dountain, dry and abandoned at 1,380 feet. McGee and others' No. 2 Conner, dry and abandoned at 1,358 feet.

Palo Pinto County

International Petroleum Corp.'s No. 3 Costello, top pay 1,386 feet, total depth 1,393 feet, initial production 30 bbls. Nelson Oil Syndicate's No. 1 Stages, total depth 3,080 feet, plugged back to 3,060 feet, shot twice, initial production 1 bbl. oil and 481,000 feet of gas.

Shackelford County

Christie's No. 3 Lee, dry and abandoned at 1,353 feet. Douglas' No. 1 Matthews, dry and abandoned at 745 feet. International Petroleum Corp.'s No. 3 Newell, top pay 1,420 feet, total depth 1,432 feet, initial production 62 bbls. Knight and Ewing's No. 7 Jeter, dry and abandoned at 1,210 feet. Owens-Snebold Oil Corp.'s No. 5 Reynolds, total depth 957 feet, initial production 111 bbls. Ungren & Frazer and Oyster's No. 1 Davis, dry and abandoned at 1,797 feet. Weir and others' No. 1 Hatcher, dry and abandoned at 707 feet. Reliance Oil Corp.'s No. 3 Nail, total depth 1,465 feet, initial production 20 bbls.

EDMONTON GAS FRANCHISE

EDMONTON, Alberta, Jan. 5.—Mayor J. A. Clarke has announced that he will recommend to the Edmonton city council that the city take over the natural gas franchise now held by Northwestern Utilities, Ltd. The franchise, granted in 1915, expires this year, and under its terms the city has the right to take over the enterprise at a price to be set either by agreement or by arbitration.

ROCKY MOUNTAIN RUNS

Estimated daily average production for the week ending January 5, follows:

	Bbls.
WYOMING	
Salt Creek	17,890
Big Muddy	1,790
Badger Basin	40
Byron	340
Dallas Derby	810
Dutton Creek	80
Elk Basin	580
Ferris	10
Frannie	1,030
Garland	40
Grass Creek	770
Greybull	10
Hamilton Dome	780
Hudson	300
LaBarge	1,530
Lance Creek	660
Lost Soldier	1,880
Mule Creek	shut in
Midway	70
Notches	shut in
Oregon Basin	3,350
Osage	700
Pilot Butte	30
Rex Lake	shut in
Rock River	1,550
South Casper	500
Poison Spider	200
Teapot	10
Total Wyoming	34,500
MONTANA	
Buckley-Border	280
Cat Creek	660
Cut Bank	5,030
Dry Creek	shut in
Kevin-Sunburst	5,000
Lake Basin	40
Pondera	880
Total Montana	11,890
COLORADO	
Florence	180
Fort Collins and Wellington	420
Iles Dome	1,760
Moffat	340
Orchard	70
Rangely	90
Tow Creek	200
Total Colorado	3,060
NEW MEXICO	
Artesia	620
Cooper area	1,720
Eunice area	3,790
Hobbs	29,940
Hogback	210
Hospah	shut in
Jal	3,210
Lea area	1,520
Maljamar	2,360
Rattlesnake	730
Table Mesa	90
Total New Mexico	44,190
Total Rocky Mountain region	93,640

West Texas Wildcats

(Continued from Page 40)

International Pet. Corp.'s No. 1 Cowden, 660 ft. from S and E, Sec. 25, Blk. 44, Twp. 2s. T.&P. Sur.
Cellar.

Landreth Prod. Co.'s No. 1 Johnson, 440 ft. from N and W, Sec. 47, Blk. 43, Twp. 1s. T.&P. Sur.
T.D. 4,180 ft.; plugged back to 4,166 ft.; flowed and swabbed 152 bbls. first 24 hours after shot.

Landreth Prod. Co.'s No. 1 Clarence Scherbauer, 660 ft. from S and E lines of Sec. 20, Blk. 44, Twp. 1n, T.&P. Sur.
T.D. 4,236 ft.; plugged back to 4,186 ft.; S.D.

Phillips Pet. Co.'s No. 1 Scharbauer, 990 ft. from S and 330 ft. from E, Sec. 16, Blk. B-15.
Derrick.

Shell Pet. Corp.'s No. 1 Connell, 1,980 ft. from N and 660 ft. from E, Sec. 12, Blk. B-16, P.S.L. Sur.
Drlg. 3,500 ft.; hole full oil.

EDWARDS COUNTY

Harry Adams' No. 1 Holman, 1,650 ft. from N and 330 ft. from E, Sec. 22, C.C.S.D. &R.G.N.G. Sur.
Show oil 520-25 ft.; T.D. 602 ft.; trying to pull pipe.

EL PASO COUNTY

Mesa Oil Co.'s No. 1 Coronado Valley.
S.D. 1,415 ft.

FISHER COUNTY

Merry Bros. and Perrini's No. 1 Howard, 1,320 ft. from N and 660 ft. from E, Sec. 18f, Blk. 2, H.&T.C. Sur.
Drlg. 2,605 ft.; hole full salt water 2,535-45 ft.

Roeser & Pendleton's No. 2 Hill, 2,310 ft. from N and 330 ft. from E, Sec. 203, B.B.B.&C. Sur.
Drlg. 1,778 ft.

GLASSCOCK COUNTY

Currie et al's No. 1 Currie, 330 ft. from S and W, Sec. 10, Blk. 34, Twp. 4s, T.&P. Sur.
Elev. 2,715 ft.; fishing 2,275 ft.

John I. Moore et al's No. 1 J. S. McDowell, 1,980 ft. from N line and 660 ft. from E line of Sec. 22, Blk. 34, Twp. 2s, T.&P. Sur.
S.D. 8,501 ft.

World Oil Co.'s No. 3-C McDowell, 2,310 ft. from N and W, Sec. 21, Blk. 34, Twp. 2s, T.&P. Sur.
T.P. 2,401 ft.; T.D. 2,402 ft.; pumped 20 bbls. per hr. for 6 hrs.

HOWARD COUNTY

Iron Mountain Oil Co.'s No. 1 Read, 330 ft. from E. line, 330 ft. from S line, Sec. 46, Blk. 30, Twp. 1n, T.&P. Sur.
T.D. 2,527 ft.; C.O.

Siegel's No. 1 Foster, 990 ft. from S and 330 ft. from W, Sec. 43, Blk. 29.
Shut down.

JEFF DAVIS COUNTY

C. M. Joiner's No. 1 Jones & Coffield, 770 ft. from N and 1,322 ft. from E, Sec. 3, Blk. 2, H.&T.C. Sur.
Standard tools.

JONES COUNTY

Campbell et al's No. 1 Enevill, 1,400 ft. from N and 370 ft. from W, Sec. 2, M.E.&P. Sur., ½ mile S of Anson.
Drlg. 1,730 ft.

Byram et al's No. 1 McWright, 200 ft. from N and 660 ft. from W of SW Sec. 5, Blk. 15, Twp. 1s, T.&P. Sur.
Drlg. 1,452 ft.

Dr. C. E. Johnson's No. 1 Young, 1,800 ft. from N and 750 ft. from W of SE 280 acres of B. Travenio Sur.
Drlg. 1,166 ft.

McKenzie & Bland's No. 1 First Nat'l Bank of Anson, 200 ft. from S and E, Sec. 53, D.&S.A. Sur.
Spudded.

Owen et al's No. 1 Johnson & Dunwoody, 3,750 ft. from S and 330 ft. from W, Sec. 6, Blk. 17, T.&P. Sur.
Location.

Richards et al's No. 1 Ransom, 200 ft. from N and E, Sec. 244, B. M. Clopton Sur.
S.D. 750 ft.

Bill Rhodes' No. 1 Wood, 300 ft. from S and E, Sec. 2, Blk. 2, T.&N.O. Sur.
Cellar.

Southern Oil Co.'s No. 2 Cade, 330 ft. S and 990 ft. E in Sec. 17, Blk. 19, T.P. Sur.
S.D. 2,400 ft.

Texas Inland Oil Co.'s No. 1-A Sayles, 85 ft. W and 160 ft. N of NW cor. of Lot 1, but in Lot 7, Blk. 20, T.&P. Sur.
Location.

LOVING COUNTY

California Co.'s No. 5-A Allen, 1,320 ft. from NE and 2,310 ft. from SE Sec. 99, Blk. 1, S.D. 4,140 ft.

D. C. Evans' No. 1 W. D. Johnson, 2,310 ft from N and 1,650 ft. from W, Sec. 12, Blk. 57, Twp. 1, T.&P. Sur.
S.D. 2,030 ft.; sulphur water.

LYNN COUNTY

Hart Oil Co.'s No. 1 Edwards, 220 ft. from N and 200 ft. from W of SE Sec. 29, L.&S.V. Sur.
S.D. 103 ft.

McCULLOCH COUNTY

G. R. White's No. 1 White, C of NE, Sec. 2, M. Dewey Sur.
T.P. 666 ft.; T.D. 670 ft.; flowing 25 bbls. day 37 gravity oil.

MARTIN COUNTY

Wright & Scott's No. 1 Flannigan, 330 ft. N and E, Sec. 22, Blk. 37, Twp. 1s, T.&P. Sur.
Rigged up; standard tools.

MITCHELL COUNTY

Harry Adams' No. 1 Mackey, 1,980 ft. from N and 660 ft. from W, Sec. 13, Blk. 29, Twp. 1n, T.&P. Sur.
Drlg. 345 ft.

PECOS COUNTY

Gulf Prod. Co.'s No. 3 White & Baker, SE cor. of N half Sec. 4, Block 207, T.C. Ry. Sur.
T.D. 1,826 ft.; T.P. 1,824 ft.; pumping.

C. S. Messenger's No. 2 Rand Jones, 1,935 ft. from S line and 1,013 ft. from W line of Sec. 5, Blk. 9, H.&G.N. Sur.
Fishing 2,447 ft.

Messenger's No. 1 Dr. Sibley, 4,930 ft. from S and 990 ft. from W, Sec. 6, Blk. 9, H.&G.N. Sur.
Location.

Shell Pet. Corp.'s No. 1-F Bower-University, 980 ft. from N and 660 ft. from W, Sec. 32, Blk. 16.
Drlg. 1,440 ft.

Shell Pet. Corp.'s No. 1-A Carlson-University, 660 ft. from N and E, Sec. 36, Blk. 16.
Drlg. 936 ft.

Trans-Tex. Oil Co.'s No. 1 Caldwell, 330 ft. from E line and 330 ft. from S line of Sec. 27, Blk. 40, Twp. 3, T.&P. Sur.
S.D. 1,301 ft.

REAGAN COUNTY

Skelly Oil Co. et al's No. 1-O H. S. Grayson, 1,980 ft. from N line and 660 ft. from W line of Sec. 33, Blk. 3, University Land Sur.
Fishing 9,120 ft.

REEVES COUNTY

J. E. Cunningham's No. 1 Altman, 2,310 ft. from N line and 1,980 ft. from E line of Sec. 1, C. C. Wyatt Sur.
S.D. 2,456 ft.

Herbert Oil Co.'s No. 1 Williams & Walker, 5,280 ft. from S and 1,320 ft. from E, Sec. 17, Blk. 6, H.&G.N. Sur.
Material.

RUNNELS COUNTY

Dennis et al's No. 1 Wash, 550 ft. from N and 660 ft. from E of W half, Sec. 133, E.T.R.R. Sur.
Spudded and S.D.

Melrose Oil Co.'s No. 1 L. P. Woods, 150 ft. from NE lines and 3,475 ft. from W line of survey, Willett Holmes Sur. No. 100.
S.D. 2,507 ft.

R. Wells' No. 1 James, 396 ft. from N and 330 ft. from E of James tract in Sec. 16, D. Diaz Sur.
S.D. 1,100 ft.

SCHLEICHER COUNTY

John M. Cooper et al's No. 1 Bert Page, 1,290 ft. from N line, 1,470 ft. from W line of Sec. 40, Blk. L, G.H.&S.A. Sur.
S.O. 5,923-30 ft. and 5,949-52 ft.; T.D. 5,987 ft.; to test.

Humble Oil & Ref Co.'s No. 1 Ike Honig, 2,640 ft. from N line and 2,650 ft. from E line of Sec. 38, Blk. M, G.H.&S.A. Sur.
Top Ellenburger 6,248 ft.; to abandon at 6,470 ft.

W. C. Proctor et al's No. 1 Judkins & Spencer, 1,320 ft. from S and W of W. W. Russell grant.
Rigged up; standard tools.

SCURRY COUNTY

Coffield & Guthrie's No. 1 Holliday, 2,310 ft. from N and 330 ft. from W, Sec. 120, Blk. 97, H.&T.C. Sur.
Show oil 2,065 ft.; S.D. 2,780 ft.

McLaughlin's No. 1 Allen, 1,331 ft. from N and 1,338 ft. from E, Sec. 298, Blk. 97, S.D. 485 ft.

STERLING COUNTY

Merry Bros. & Perrini's No. 1 Standaberry, 1,980 ft. from N and E, Sec. 20, Blk. 38, W.&N.W. Sur.
Location.

STONEWALL COUNTY

Merry Bros. and Perrini et al's No. 1 Williams, C SW of SW Sec. 6, Blk. C, A.B. &M. Sur.
S.D. 3,000 ft.

SUTTON COUNTY

Teas et al's No. 1 Mower, 1,980 ft. from S and W of Sec. 29, Blk. 5, T.W.&N.G. Sur.
Drlg. 1,972 ft.

TAYLOR COUNTY

Dunnigan Bros. et al's No. 3 Hunter, 225 ft. from S and 750 ft. from W, Sub. 14, Willis Sur.
Drlg. 2,180 ft.

TERRELL COUNTY

W. A. Sudderth's No. 1 Phelps, 2,167 ft. from N line and 2,482 ft. from the W line of Sec. 5, Blk. 4-A, G. W. Turley Sur.
T.D. 5,635 ft.

UPTON COUNTY

Gulf Prod. Co.'s No. 103 McElroy, 1,980 ft. from S and 660 ft. from W, Sec. 197, Blk. F, C.C.S.D.&R.G.N.G. Sur.
S.D. 10,975 ft.; swabbed 36 bbls. oil and 319 bbls. water; fluid level 7,500 ft. after swabbing.

Humble Oil & Ref. Co.'s No. 1 Pollock, C of NW, Sec. 4, Blk. M.
Location.

King Mountain Pet. Co.'s No. 1 Sherk, 330 ft. from S and W, Sec. 29, Blk. 1, M.K.&T. Sur.
S.D. 800 ft.

Williams & Williams Drlg. Co.'s No. 1 Robbins, 1,600 ft. from S and 1,900 ft. from E, Sec. 4, G.C.&S.F. Sur.
S.D. 2,040 ft.

WARD COUNTY

Alexander's No. 1 Richter, 1,650 ft. from NW, 1,170 ft. from NE line of Sec. 27, Blk. 34, H.&T.C. Sur.
S.D. 1,700 ft.

Bradford et al's No. 1 E. R. Allen, 660 ft. from NW line and 551 ft. from NE line, Sec. 11, H.&T.C. Sur.
Drlg. 763 ft.

Caprito's No. 1 Hardage & Wilson, 2,310 ft. from NE and 990 ft. from SE, Sec. 11, Blk. 34, H.&T.C. Sur.
Location.

Cook Drlg. Co.'s No. 1 Wood, 330 ft. from NW and SW, Sec. 5, W. F. Stewart Sur.
T.D. 2,548 ft.; cleaning out.

Gulf Prod. Co.'s No. 53 O'Brien.
Drlg. by tools 2,702 ft.

Gulf Prod. Co.'s No. 53 O'Brien.
T.D. 2,768 ft.; hole full oil; C.O.; flowing 45 bbls. day.

Postellio & Caprito's No. 1 Purcell, 330 ft. from NE and 990 ft. from NW, Sec. 17, Blk. 34, H.&T.C. Sur.
Drlg. 2,638 ft.

Rector Oil Co.'s No. 1 Monroe, 660 ft. from SE and NE, Sec. 2, Blk. 1, W.&N.W. Sur.
Set csg. 665 ft.

Sageland Oil Corp.'s No. 2 Pure-Bennett, 1,650 ft. from NW and 2,310 ft. from SW Sec. 16, Blk. 34, H.&T.C. Sur.
Spudded and S.D.

West Texas O. & R. Co.'s No. 1-C University, 330 ft. from N and E, Sec. 6, Blk. 14.
Driving csg. 300 ft.

WINKLER COUNTY

Gulf Prod. Co.'s No. 1 Wight, 330 ft. from S and E, Sec. 20, Blk. 40, P.S.L. Sur.
Standard tools.

Harry Adams' No. 2 Scarborough, 990 ft. from N line and 990 ft. from W line, Sec. 2, Blk. 77, P.S.L. Sur.
Location.

Jeffries et al's No. 1 Brown & Altman, 2,310 ft. from S and W. Sec. 6, Blk. B-5. T.D. 3,098 ft.; filled 800 ft. in 2½ days; oil at 3,095 ft.

Dr. Jeffries et al's No. 1 Underwood, 330 ft. from S and 2,310 ft. from E, Sec. 26, Blk. B-3.
S.D. 800 ft.

J. C. Maxwell's No. 1 Clapp, 2,310 ft. from N and 330 ft. from E, Sec. 27, Blk. 26, P.S.L. Sur.
Drlg. 2,820 ft.; oil at 2,738 and 2,760 ft.

Maxwell's No. 1 Daugherty.
Drlg. 1,660 ft.

R. S. Mathews et al's No. 1 Evans, 1,320 ft. from N line and 1,320 ft. from W line, Sec. 44, Blk. 73, P.S.L. Sur.
S.D. 110 ft.

Mid-Continent Pet. Corp.'s No. 1 Howe, 2,310 ft. from N and 330 ft. from W, Sec. 12, Blk. 26, P.S.L. Sur.
S.O. 2,373-78 ft.; T.D. 2,894 ft.; fishing.

Richardson's No. 1 Walton, 1,010 ft. from S and 330 ft. from W, Sec. 1, Blk. B-3.
Drlg. 370 ft.

Sid Richardson's No. 1 Hill, 1,980 ft. from E line, 660 ft. from S line, Sec. 18, Blk. B-11, P.S.L. Sur.
S.D. 3,755 ft.

Sayre Oil Co.'s No. 1 Leck, 330 ft. from S and E, Sec. 2, Blk. 36, P.S.L. Sur.
T.D. 2,595 ft.; to set csg.

Sayre Oil Co.'s No. 2 Howe, 330 ft. from N and W, Sec. 12, Blk. 26, P.C.L. Sur.
Location.

Skelly Oil Co.'s No. 2 Halley, 1,320 ft. from N and 2,200 ft. from E, Sec. 25, Blk. B-11, P.S.L. Sur.
Drlg. 2,720 ft.

Sinclair Prairie Oil Co.'s No. 1 Cummings, 2,310 ft. from N and 330 ft. from E, Sec. 11, Blk. 26, P.S.L. Sur.
T.D. 2,940 ft.; hole sanded after flowing 66 bbls. in 24 hrs.

Sinclair Prairie Oil Co.'s No. 3 Cummins, 330 ft. from N and E, Sec. 11, Blk. 26, P.S.L. Sur.
Rigged up rotary.

Texas Panhandle Wildcats

Week Ending January 7

CARSON COUNTY

McGill's No. 1 Cooper, 330 ft. from S and W of N¼ NE Sec. 4, Blk. 9, I.&G.N. Sur. T.D. 3,053 ft.; pumped 421 bbls. first day.
McClintock et al's No. 1 Jordan, 660 ft. N, 413 ft. W Sec. 105, Blk. 4, I.&G.N. Sur.
Drlg. 1,170 ft.
Phillips Pet. Co.'s No. 1 Cooper, 330 ft. S and E. Sec. 4, Blk. 9, I.&G.N. Sur.
Drlg. 296 ft.

COLLINGSWORTH COUNTY

Andrews & Kerr's No. 1 Gideon-Bell, C NW NE Sec. 6, Blk. 13, H.&G.N. Sur.
Drlg. 2,220 ft.; 100 ft. oil in hole in 8 hrs. Oil at 2,142 ft.

DALLAM COUNTY

Eben Warner's No. 1 Jarbie, 1,520 ft. from S line, 415 ft. from W line, Sec. 2, B.&B. Sur.
S.D. 3,200 ft.; may abandon.

GRAY COUNTY

Irish-American Oil Co.'s No. 1-B Morse, 990 ft. S and 330 ft. E, W½ NE Sec. 54, Blk. 25, H.&G.N. Sur.
Drlg. 520 ft.
Plains Holding Co.'s No. 1 Morse-Gulf, 330 ft. S and W, Sec. 57, Blk. 25, H.&G.N. Sur.
Material.
Stanolind O. & G. Co.'s No. 1 Cutter, 330 ft. N and E, W½ NE Sec. 175, Blk. 3, L&G.N. Sur.
Location.
Texas Co.'s No. 1-C Taylor, 1,325 ft. from N and 1,320 ft. from W, Sec. 53, Blk. B-2, H.&G.N. Sur.
T.D. 3,006 ft.; flowed 260 bbls. second 24 hours.
Texas Co.'s No. 1 Taylor, 990 ft. S and W of Sec. 81, Blk. B-2, H.&G.N. Sur.
Drlg. 1,880 ft.

HUTCHINSON COUNTY

Dixon Creek O. & Rfg Co.'s 1-C Johnson, 1,020 ft. N, 330 ft. from W of most westerly NW cor. of J. T. Williams Sur.
Location.
Huey et al's No. 1 Christian, 330 ft. from S and 330 ft. from W, Sec. 32, Blk. Y, A.&B. Sur.
S.D. 3,091 ft.; bldg. tanks.
Stekoll's No. 2 G. W. Whittenburg, 330 ft. S and W of H. Prewitt Sur.
T.P. 2,880 ft.; T.D. 2,974 ft.; shot and C.O.
Stanolind O. & G. Co.'s No. 1 Kinzer, 330 ft. S and E, Sec. 148, Blk. 3, T.&N.O. Sur. Material.

MOORE COUNTY

Alma Oil Co.'s No. 1 Jones, 330 ft. N and W. Sec. 171, Blk. 3-T, T.&N.O. Sur.
T.P. 2,384 ft.; T.D. 2,385 ft.; flowing.
Phillips Pet. Co.'s No. 2 J. C. Wilson, Sec. 157, Blk. T-3, T.&N.O. Sur.
T.D. 2,912 ft.; P.B. to 2,191 ft.; shot 200 qts. from 2,135-75 ft.; 45,000,000 ft. gas.
Texoma Nat. Gas Co.'s No. 1 Haas, 2,673 ft. N, 1,791 ft. E, Sec. 20, Blk. P.M.C., E.I.R.R. Sur.
Standardizing 2,867 ft.
Texoma Nat. Gas Co.'s No. 3-P Sneed, 3,-734 ft. N and E of M. George Sur.
Drlg. 2,455 ft.
Texoma Nat. Gas Co.'s 1-G Taylor, 1,302 ft. N and 2,620 ft. E Sec. 21, Blk. M-1, Wheatley Sur.

POTTER COUNTY

U. S. Bureau of Mines, No. 3-A Bivins, C NE Sec. 22, Blk. 4, B.S.&F.
Drlg. 3,046 ft.

RANDALL COUNTY

English et al's No. 1 Oxnard.
Drlg. 5,632 ft.

WHEELER COUNTY

Bell O. & G. Co.'s No. 1-B Walker, 330 ft. S and 330 ft. W, Sec. 44, Blk. 24, H.&G.N. Sur.
Drlg. 1,465 ft.
Bowers & Carvers' No. 1 L. B. Simms, 330 ft. from N line, 330 ft. from E line of SW Sec. 60, Blk. 17, H.&G.N. Sur.
Drlg. 2,270 ft.
Carver Drilling Co.'s No. 1 Rock Island, 1,600 ft. from S line, 2,310 ft. from W line, Sec. 47, Blk. 13, H.&T.C. Sur.
Drlg. 1,940 ft.
Christie-Hickman's No. 1 Walker, 330 ft S and E of NE Sec. 49, Blk. 24, H.&G.N. Sur.
Drlg. 2,475 ft.
Cloud et al's No. 1 Farren, 330 ft. N and W, NE SE Sec. 34, Blk. 24, H.&G.N.
T.D. 2,245 ft.; spraying with gas.
Ben G. Barnett's No. 1 Boren, NW cor. NE Sec. 24, Blk. 13, H.&G.N. Sur., 11 miles E and S of Shamrock.
S.D. 1,893 ft.
Johnson et al's No. 1 Grogan, 426 ft. N and 150 ft. W, Sec. 57, Blk. 23, H.&G.N. Sur.
Drlg. 1,400 ft.
LeFors Pet. Corp.'s No. 1 Perkins, 330 ft. from S line, 330 ft. from W line, Sec. 54, Blk. 24, H.&G.N. Sur.
Rig.
Martin & Son's No. 1 Plummer, 330 ft. N and E NW SW Sec. 45, Blk. 45, H.&G.N.
Drlg. 2,325 ft.; gas at 2,270 ft.
Madge Oil Co.'s No. 1 Dougherty, C SW Sec. 94, Blk. 23, H.&G.N. Sur.
Drlg. 2,106 ft.
Reno Oil Co.'s No. 1 Mankins, SW SE SE Sec. 54, Blk. 13, H.&G.N. Sur.
T.D. 2,216 ft.; no pipe line connection.
Rogers' No. 1 Timberlake, 330 ft. from N and W of NE NW Sec. 86, Blk. 13, H. &G.N. Sur.
Drlg. 110 ft.
Smith Bros.' No. 1 Johnson, 330 ft. N and W, Sec. 34, Blk. 24, H.&G.N. Sur.
Drlg. 242 ft.
Underwood et al's No. 1 Roach, 330 ft. N and E, Sec. 27, Blk. 24, H.&G.N. Sur.
Drlg. 1,610 ft.

East Central Texas Wildcats

(Continued from Page 43)

check; in sec. of 360-ac. tract and sur., W. D. Perry Sur.
Elev. 316 ft.; S.D. 2,418 ft.

HENDERSON COUNTY

Campbell and Chamberlain's No. 1 R. Ansley, 1,724 ft. W and 300 ft. S of SE cor. of M. Matthews Sur., N. H. T. Thompson Sur. Skidding derrick.
Crosby and Pulp's No. 1 M. T. Dobbs, NW cor. of east Dobbs 100-ac. tract, 4 miles E of Malakoff and S of Railroad, George Aldrick Sur.
Coring 4,150 ft.

HOPKINS COUNTY

D. A. Hale et al's No. 1 L. M. Hall, 200 ft. from N and E lines of 70-ac. tract, 1 mile SE of Miller Gros. A. Caro Sur.
S.D. 1,485 ft.

HUNT COUNTY

Cauble & Thompson's No. 1 Reed, 330 ft. N of northerly NE cor. of C. B. Payne Sur., but in F. Thweatt Sur., 3 miles SE of Greenville.
Rigged up.
G. S. & S. Co.'s No. 1 O. Popper.
Fishing 2,865 ft.
Hager et al's No. 1 Dallas Land Bank, 200 ft. from S and 100 ft. from N lines of L. Hart Sur., 7 miles SW of Greenville.
Drlg. 1,125 ft.
L. G. Priest's No. 1 Amelia Barnett, 1,075 ft. from W line, 330 ft. from S line of J. C. Hamer Sur.
Reaming 3,587 ft.

KAUFMAN COUNTY

W. J. Lewis et al's No. 1 D. Clark, 430 ft. from S line and 600 ft. from E line of Sur., 6¼ miles NW of Elmo.
S.D. 1,524 ft.
L. P. Kean's No. 1 J. B. Hunter, R. Sowell Sur., 300 ft. from SW and 150 ft. from SE of 50-ac. tract, 4 miles S of Terrell.
S.D. 2,010 ft.

LIMESTONE COUNTY

Chapman's No. 1 Hunt, 300 ft. from N and 350 ft. from W line 34.75-ac. tract, Israel Wood Sur., 3 miles NE of Kosse.
Drlg. 425 ft.
C. F. Carter's No. 1 Dean, 660 ft. from SE and 330 ft. from SW lines of 75-ac. tract, P. Valella Sur., 3½ miles SW of Mexia.
S.D. 75 ft.
Doughtry et al's No. 1 S. Welch, 150 ft. from NW and 900 ft. from NE of 77.64-acre tract in A. Varilia Sur., 4 miles W of Groesbeck.
T.D. 852 ft.; to retest.
Pure Oil Co.'s No. 1 Rogers, 860 ft. S and 2,700 ft. W of 330-ac. tract, P. Villeria Sur.
Drlg. 745 ft.
Schultz' No. 1 Roy Ward, NE cor. of 73.3-ac. tract, 5 miles W of Mexia Field, Harrison York Sur.
Derrick.
V. V. Waite's No. 1 Barrow, 650 ft. from S and 950 ft. from E line of 320-ac. tract, W. G. McKenzie Sur., 3½ miles NW of Thornton.
Pits.

NACOGDOCHES COUNTY

Murray Oil Co.'s No. 1 C. B. Watkins, 150 ft. from N line and 320 ft. from NW lines of 160-ac. tract, 3 miles S of Caro, H. Y. Bailey Sur.
S.D. 3,925 ft.
Wells et al's No. 1 Z. Rambiln, 900 ft. N and 320 ft. W of SE cor. of tract and survey, J. Simpson Sur., 12 miles NE of Nacogdoches.
Rigged up.

NAVARRO COUNTY

Bennett Brothers' No. 1 T. E. Stewart, 150 ft. from NE line of lease, 10 miles SW of Corsicana, Wm. R. Bowen Sur.
S.D. 1,136 ft.
R. B. Codding et al's No. 1 Lela Kent, 450 ft. from S line and center of N and S lines of lease, 3 miles NE of Chatfield, C. B. Emmons Sur.
S.D. 1,550 ft.
W. J. Keeling et al's No. 1 J. F. Rushing 484 ft. from N line and 150 ft. from W line of 184-ac. tract, 6 miles SW of Richardson, Henry Ford Sur.
T.D. 3,880 ft.
McCullough et al's No. 1 C. Berry, 330 ft. from SE cor. of 35-acre tract, 1 mile W of Dawson, William Moss Sur.
S.D. 625 ft.

RED RIVER COUNTY

Abercrombie & Harrison's No. 1 Roberts, 4,500 ft. from E and 500 ft. from N line of John Ware Sur., 8 miles N of Clarksville.
S.D. 160 ft.
Dinger's No. 1 W. T. Norris, 1,000 ft. from S and 1,900 ft. from W of 400-ac. tract, Jos. Guest Sur., 1 mile S of Detroit.
Derrick.

RUSK COUNTY

George Hudson et al's No. 3 Jeff Phillips 150 ft. from N line of survey and 700 ft. from W line of 100-ac. tract, 4 miles SE of Minden, N. Villaria Sur.
S.D. 2,672 ft.
Ben Lamb's No. 1 H. Leath, 330 ft. out of NW cor. of 185-ac. tract in L. J. Dooley. Coring 3,600 ft.

SMITH COUNTY

Deck et al's No. 1 Dendall, 330 ft. from S and W of 55-ac. tract, J. Williams Sur., 3 miles E of Van Field.
S.D. 1,100 ft.
Fair et al's No. 1 Rushing, 1,000 ft. SE of old hole, 1½ miles SE of Whitehouse.
S.D. 4,673 ft.
Paul S. Williams et al's No. 1 Dean, 320 ft. E and 750 ft. N of 100-ac. tract in Deason Moore Sur., 1 mile NE of Bullard.
Drlg. 3,750 ft.; top Pecan 2,215 ft.

UPSHUR COUNTY

Byrd & Frost's No. 1 Pittsburgh National Bank, 330 ft. out of most northerly SE cor. of John Parker Sur.
Drlg. 160 ft.

VAN ZANDT COUNTY

Delcambre et al's No. 2 Crim, 400 ft. from S and 150 from E lines, Nacogdoches Co. School Lands.
Drlg. 935 ft.
Pet. P. L. & Storage Co.'s No. 4 Mrs. S. McGee, 450 ft. S of N line and 155 ft. E of W line of 53.4-ac. tract, Blk. 20.
S.D. 1,268 ft.
Pete Corley et al's No. 1 Slaton, 160 ft. from W and 660 ft. from N lines of William Carlton Sur., 3 miles SE of Ben Wheeler.
S.D. 4,004 ft.
Florence Oil Co.'s No. 2 Sanger, 316 ft. W of SE cor. and 151 ft. S of S line of Pure-Blackstock lease, John Walling Sur.
Rig.
Gillum and Allen et al's No. 1 A. T. Bass, 150 ft. from W line and 150 ft. from N line of 10-ac. tract, William Hart Sur.
S.D. 1,700 ft.
Green and Winn's No. 1 Eaton, 330 ft. out of most westerly SW cor. of J. Wilson Sur., 2 miles SE of Martin.
Location.
American Oil Co.'s No. 1 Bryant, 482 ft. N of same operator's dry hole, Nacogdoches County School Land Sur.
S.D. 1,325 ft.
Lane-Tex Co.'s No. 1 Listenbee, 150 ft. N and E of tract, Wm. Daniel Sur.
Drlg. 750 ft.
Overton Ref. Co.'s No. 5 Carter, 1,028 ft. S and 300 ft. E of No. 2, Wm. Daniels Sur.
Drlg. 1,000 ft.
Miller et al's No. 1 J. M. Palmer, 150 ft. from S and E lines of 69-ac. tract, Nacogdoches County School Land Sur.
S.D. 1,000 ft.
Peden and Olson's No. 1 J. M. Palmer, 300 S of No. 2 and 140 ft. from W line of tract, J. Goodman Sur.
S.D. 1,288 ft.
Peden & Olson's No. 4 Brannen, 150 ft. N and 600 ft. E of No. 1, J. Goodman Sur.
S.D. 1,237 ft.
M. Rouch et al's No. 1 Bearden & Palmer 150 ft. out of SE cor. of 61-ac. tract, Nacogdoches C.S.L.
S.D. 1,237 ft.
Wadley's No. 1 Carrus, 500 varas N and 1,000 varas E of most northerly SE cor. of 588-ac. tract, S.P. Sur.
Rigging up.

Southwest Texas Wildcats

(Continued from Page 39)

000 ft. NW and SW lines of Thos. Green Sur.
Location.

FRIO COUNTY

W. T. Shoemaker's No. 1 M. Roche, 150 ft. SW cor. of Carl Wenzel Sur. No. 139.
Drlg. 900 ft.

GILLESPIE COUNTY

Ed L. Nixon's No. 3 Lindig, 13,694 ft. S line, 1,333 ft. W line, Maria Josepha Guerra Sur. No. 41, or 6 ft. S of No. 1.
Standing 653 ft.

GOLIAD COUNTY

Magnolia Pet. Co.'s No. 1 Albrecht, 660 ft. N line, 330 ft. SW line of J. P. Reid Sur.
Drlg. 4,600 ft.

GUADALUPE COUNTY

J. W. Burrows' No. 1 Beuhring, 1,000 ft. S line, 750 ft. W line of Jos. Clements Sur., SW Darst Creek Field.
Location.
H. H. Weinert et al's No. 1 Sylle Schmidt, Wakefield Sur., E of Kingsbury Field.
Drlg. 1,513 ft.

HIDALGO COUNTY

Clay, Spencer & Hood's No. 1 Brooks & Showers, 330 ft. N and E lines of Lot 4, Blk. 12, Por. 79-80.
Drlg. 400 ft.
Hardy & Lynch's No. 1 Southland Dev. Co., 330 ft. N and W lines, Blk. 14, Sur. 17.
Rigging up.
Harrison, Medline et al's No. 1 Daskam, 950 ft. W line Porcion 42, 330 ft. N of Old Military Road.
Derrick.
Kingwood Oil Co.'s No. 1 Baskom, 315 ft. W line, 318 ft. N line of Lot A-23, Blk. 49, Porcion 41.
Drlg. 1,900 ft.
Kingwood Oil Co.'s No. 1 Doughty, 1,214 ft. from N line, 3,750 ft. from W line of Tract 90, in San Salvador del Tule grant.
Location.
Kingwood Oil Co.'s No. 1 Fairbanks, Porcion 64, 10 miles S of McAllen.
Abd. 4,700 ft.
Maxwell-Young's No. 1 King, 175 ft. N and E lines of Lot 8, Blk. 11.
T.D. 875 ft.; drlg.
Medlin et al's No. 2 G.L.&C.C., E of No. 1.
Ready to spud.
Union Sulphur Co.'s No. 1 John C. Engleman, 400 ft. S and W lines, Lot 8, Blk. 79, Mestenas tract.
Drlg. 6,960 ft.
Downey & Morton's No. 1 Deskam, 450 ft. from E line, 55 ft. from S line of Blk. 34, Por. 45.
S.D. 2,310 ft.
Gato Oil Co.'s No. 1 Brooks & Showers, 500 ft. N line, 400 ft. W line of Tract 3, Blk. 26, Por. 79.
Drlg. 2,400 ft.
Jenkins & Secton's No. 1 John D. Puckett, 330 ft. N and W lines, Share 96, San Salvador del Tule grant.
Derrick.
Union Sulphur Co.'s No. 2 American Rio Grande L. & I. Co., 400 ft. from S and E lines of tract, Blk. 86, North Capisallo district.
T.D. 6,044 ft.; twisted off 2,629 ft.

JIM HOGG COUNTY

Miller & Pippin's No. 1 Yeager, 527 ft. S line, 150 ft. E line of Blk. 6, Sur. 20.
Location.
John D. Norwood's No. 1 C. W. Hellen, 330 ft. N and W lines, Sur. 48.
T.D. 1,370 ft.; S.D. for orders.

J. M. Shugart's No. 1 R. Holbien, 100 ft. from N line, 330 ft. from S line of Blk. 55, Sur. 17 of Holbien Subd., of Las Animas grant.
S.D. 490 ft.
Texas Co.'s No. 1 Guiterrez, 2,310 ft S line, 330 ft. E line of Sur. 164.
Location.

JIM WELLS COUNTY

O. W. Killam's No. 4 Wade, ¼ mile N of No. 3.
Moving in rig.
Smith & Storey's No. 1 Martha E. Ellworth, 330 ft. N and W from SE cor. of W½ of W 426 acres of Stanley Welch Sur.
P.B. to 2,300 ft.; T.D. 6,115 ft.; swbng.

KARNES COUNTY

American Liberty Oil Co.'s No. 1 Von Roeder, 330 ft. from NE and SE lines of 204-ac. tract in Johnson Sur.
Location.
E. E. Green's No. 1 Miss Olive Henke, 3,-640 ft. from SW cor. N along W line, thence at R/A 330 ft., Seguin grant.
Sand 1,505-09 ft.; S.D. for repairs.
Pacific Gas & Fuel Co.'s No.2 Choate, near No. 1.
Moving in material.
J. A. Thompson's No. 1 Lyons, 330 ft. SW line, 1,320 ft. SE of N cor. of Choate land, Bass Sur.
Sand 2,419-31 ft.; tested gas.

KERR COUNTY

Emerald Oil Co.'s No. 1 Whitworth, 1,160 ft. from S line and 1,333 ft. from E line of Sec. 1,439, of the H.E.&W.T. Sur.
Prepare to deepen; T.D. 650 ft.
Jeff Love and Eastland Oil Co.'s No. 5-B Jeff Love, 1,500 ft. SE of No. 1 and 1,580 ft. from SE cor. and 300 ft. from N line of Sec. 1,591.
1,550 ft. of oil in hole; T.D. 3,530 ft.
J. F. Morrissey et al's No. 1 F. A. Karge, 1,400 ft. from S line and 600 ft. from E line of survey, Sec. 1, B.S.&F. Sur.
Abd. 2,019 ft.

LEE COUNTY

Jas. E. Pederson's No. 1 Turner, 1,860 ft. from N line, 150 ft. from E line of tract, David Hudson Sur.
T.D. 6,330 ft.; show of oil in lime and chalk; testing.

LIVE OAK COUNTY

Arthur, Brunson & Hall's No. 1 W. P. Ward, 150 ft. from W line, 2,400 ft. from N line of 200-ac. tract, in B. Ayers Sur.
Location.
Baugh & McMillan's No. 1 Walton & Campbell, D. R. Fant Sur.
Drlg. 840 ft.
Henderson Coquat et al's No. 1 Little, 1,-320 ft. NE of S cor. of M. M. Shipp Sur. and 330 ft. N of S line.
Coring top of Pettus 4,935 ft.
Loma Oil Co.'s No. 2 Brewer, 330 ft. from SE and NE lines of 100-ac. tract in Sparks Sur.
Drlg. 750 ft.
Loma Oil Co.'s No. 1 O. M. Withers, 330 ft. S and W lines of tract in T. B. Sparks Sur.
Location.
Luling O. & G. Co.'s No. 1 Rex, C of SW of G.H.&H. Sur., Abstract 197, 3 miles S of Mileska.
Rigging up.

MAVERICK COUNTY

Mike Chorgas et al's No. 1 Mathews, on edge of municipal airport at Eagle Pass.
C.O.; T.D. 480 ft.

McMULLEN COUNTY

H. K. Boysen's No. 1 Hagist, 990 ft. S, 330 ft. W of NE cor. Sec. 10, H.&T.C.Ry. Sur.
Coring 2,265 ft.

MEDINA COUNTY

Scoggins & Sanders' No. 1 L. W. Burrell, 150 ft. from E line, 1,750 ft. from N line of M. E. Gage Sur. 395.
S.D. 1,825 ft.

MILAM COUNTY

Barron & McGee's No. 1 R. Lundgren, 1,-100 ft. NE line, 600 ft. NW line of 125-ac. tract in L. Kimbro Sur.
Location.
C. F. Drake et al's No. 1 Standard Coal Co., 970 ft. SW line, 1,700 ft. SE line of G. L. Johnson Sur.
S.D. 1,575 ft.; (corrected).
Second Natl. Bank's No. 1 B. P. Ward, 150 ft. SW line, 950 ft. SE line of 100-ac. tract, L. Taylor Sur.
Drlg. 2,862 ft.

REAL COUNTY

M. J. Heartwell et al's No. 2 L. J. Haby, 694 ft. from W line and 2,152 ft. from S line of A.B.&M. Sur. No. 175.
T.D. 2,837 ft.; moving in new engine.

SAN PATRICIO COUNTY

Allied Minerals' No. 1-A Ramsey, 466 ft. E, 220 ft. N of SW cor. of the North R. Giddings Sur. on a 1,000-ac. tract.
Sandy shale 2,642 ft.; moving in heavier rig; S.D.
Carpenter et al's No. 1 Sadler, Mud Flats area.
Standing 6,009 ft.
Lonnie Glasscock's No. 1 M. F. Timmons, 330 ft. out of SE cor. of Blk. 27, San Patrico townsite.
Drlg. 6,100 ft.

STARR COUNTY

Armstrong, Emanuel & Adams' No. 1 S.C. C.C., 330 ft. from S and E lines of Blk. 57, Porcion 88-89.
Drlg. 875 ft.
Conway & Emanuels' No. 1 S.C.C.C., 330 ft. W line, 330 ft. S line, Blk. 62, Jeffries Lambeth Div., Porcion 88-89.
Moving in material.
C. R. Borah's No. 1 A. Guerra, San Jose grant, 330 ft. from N and 150 ft. from E lines of Sec. 6 (NE part of county).
Reaming 2,687 ft.
John H. Clopton's No. 1 Roos, 13,155 ft. N of highway along E line of Por. 92, 3,800 ft. N, 80 deg. 45 min. W.
Location.
Crawford et al's No. 1 Hicks et al, 150 ft. SE and NE line of NW, Perdernal grant.
Drlg. 861 ft.

Dalnwood Oil Co.'s No. 1 Guerra, 5,280 ft. W line and N line of Share 26, Porcion 70-71-72.
Location.
R. H. Vise's No. 1 Carruth, 2,690 ft. S line, 2,300 ft. W line, Share B-1, Porcion 91-92.
Drlg. 2,875 ft.
J. T. Kyle et al's No. 1 G.L.&C.C., 330 ft. midway between N and S lines of Lot 4, Porcion 100.
Location.
Merren, Johnson & Jeffries' No. 2 S.C.C.C., 660 ft. N line, 330 ft. W line of Blk. 27, Porcion 88-89.
T.D. 2,715 ft.; est. 15,000,000 ft. of gas a day.
C. L. Smith et al's No. 1 J. M. Longfellow, 330 ft. out of NW cor. of Sur. No. 381.
S.D. 3,830 ft.
Heep Oil Co.'s No. 1 Guerra, 330 ft. from NE and SE lines of Blk. 35, J. N. Crawford Subd., Por. 56, Jurisdiction of Mier.
Drlg. 518 ft.
Smith & Weston's No. 1 M. M. Garcia, Blk. 9, Sur. 908.
Drlg. 3,127 ft.
Dale Sneed's No. 1 Y. and V. Guerra, 330 ft. W line of Por. 68, 330 ft. S line of 1,000-ac. block of N end of Por. 92, in Por. 68.
Moving in derrick.
E. L. Younkin's No. 1 Kelsey Bass, 330 ft. from S line, 7 ft. from W line of Blk. 19, in Porcion 87.
Standing 2,572 ft.

TRAVIS COUNTY

Barron & McGee's No. 1 R. Lundgren, 1,100 ft. NE line, 600 ft. NW line of 135-ac. tract in L. Kimbro Sur.
S.D.; dry Serpentine 810 ft.
Humble O. & R. Co.'s No. 3 Buck Christian, 2,150 ft. SW line, 2,300 ft. NW line of J. P. Kemp Sur.
Drlg. 125 ft.
Mimms, New & Anderson's No. 1 Bohm, 1,250 ft. SW along NW line of Bohm tract from N cor. and 150 ft. NW in S. Del Valle Sur.
Standing 515 ft.
C. A. Stubbs' No. 1 Julius Kerlin, 530 ft. SW line, 450 ft. NW line of 123-ac. tract in I. Lindsay Sur. No. 61.
Standing 709 ft.
Title et al's No. 1 Johnson, 330 ft. each way from cor. of 50-ac. tract in Kimbro area.
Drlg. 687 ft.

WEBB COUNTY

Betterhaim & Jones' No. 1 M. Jones, 600 ft. E line, 1,620 ft. S line of Sur. 1,640.
Standing 455 ft.
Mills Bennett's No. 1 Slator, 330 ft. SW and NW lines of Blk. 46, Mission Oil Co. Subd., Borrego grant.
Rigging up.
Payne et al's No. 1 Hoggterp, Blk. 6, Sur. 1,110, W of Oilton.
Moving in rig.

WILLACY COUNTY

South Texas Dev. Co.'s No. 1 Armendais, 1,500 ft. W of Arroya Colorado River, 1,200 ft. N of S line of Tract 4.
Drlg. 400 ft.

WILLIAMSON COUNTY

F. L. Brown's No. 1 Carl Seggren, 240 ft. S line, 960 ft. W line of S. Woodruff Sur.
Abd. 1,450 ft.
Fritz Fuchs' No. 1 Pflugger, 500 ft. S and E lines of Jacob Sapington Sur.
Location.
Johnson & Ray's No. 1-B M. Oxford Smith, 600 ft. S of No. 1-A in S. Williams Sur.
Spudded.
Johnson & Ray's No. 1-A Mary Smith Oxford, 350 ft. S, 40 deg. E of No. 1 Williams Sur.
S.D. 1,149 ft.
T. J. McConnell's No. 1 J. R. Nazier, 150 ft. from S line and San Gabriel River and 150 ft. from E line of 124-ac. tract in Zarzo Sur.
Abd. 960 ft.
J. Morgan Russell's No. 1 Nelson ,150 ft. S line, 1,115 ft. E line of John L. Justice Sur. No. 2.
S.D. 894 ft.
J. Morgan Russell's No. 3 Nelson, 3,300 ft. from CEL of W. Donaho Sur. No. 117, 1,600 ft. from CSL.
S.D. 375 ft.
Stailey & Caffey's No. 1 A. J. Nelson, 350 ft. from SE line and 150 ft. from NE line of Barney C. Love Sur.
Abd. 355 ft.

WILSON COUNTY

Ray Oil Co.'s No. 1 J. M. McDaniel, 1,700 ft. from SW line, 350 ft. from NW line of 193.5-ac. tract in Concepcion Bostello Sur. No. 9.
Rigged up and S.D.
J. C. Yancey's No. 1 Lyssy, 300 ft. from SE and SW lines of lease in D. J. Holt Sur.
T.D. 1,600 ft.; S.D. in shale.

ZAPATA COUNTY

Danvers & Harrison's No. 1 M. J. Vela, 630 ft. NE line and 300 ft. NW line, or 3,140 ft. E line and 330 ft. N line of Por. 39, Blk. 7, Bela Subd.
T.D. 1,403 ft.; reaming at 1,400 ft.
Merle Gunby's No. 4 Alice D. Haynes, 760 ft. from SE line, 200 ft. from SW line of Blk. 4, Haynes Subd. of Comitas & Villa grant.
Testing sand 816 ft.
R. B. Morrison's No. 1 Vela, 1,320 ft. SW line, 660 ft. SE line of Blk. 5, Re-Plat of Jamison Subd., Por. 30.
Drlg. 147 ft.
Joe Palmer's No. 1 J. M. G. Martinez, 150 ft. SE and SW line, Blk. 27, Sur. 434.
Standing 630 ft.
A. H. Wray's No. 5 Gopher Trust, 330 ft. NE and NW lines of Blk. 12, Sur. 1, San Ignacia Subd., Borrego grant.
Drlg. 1,927 ft.

ZAVLA COUNTY

Van Beavers et al's No. 1 Flowers, 1,600 ft. E line, 600 ft. N line of Sec. 19, L.&G.N. Ry. Sur., Blk. 1.
Rigging up.
Humble Oil & Ref. Co.'s No. 1 R. L. Ball 330 ft. E of W line of Luciana De la Gar.
Drlg. 2,551 ft.

Southwest Texas Proven

Week Ending January 5

NORTH DALE POOL—BASTROP COUNTY

Cole Pet. Co.'s No. 1 Rubin Gage, NE cor. of tract, 150 ft. each way from corner.
Location.
Marts & Beaver's No. 1 Voss, 875 ft. from SW line, 155 ft. from NW line of 100-ac. tract, in Litton Sur. No. 1.
Standing 1,825 ft.
Joe E. Mills' No. 1 Mrs. W. J. Cardwell, 900 ft. from SE line, 1,200 ft. from SW line of tract, J. A. Navarro Sur.
S.D. 1,475 ft.
Ogden & Reed's No. 3 M. F. Tally, 300 ft. NE line, 200 feet SE line of 70-ac. tract in Joshua Gray Sur.
Showing oil 2,674 ft.
Porter and Neal's No. 1 J. F. Wolff, 156 ft. from NE line, 2,800 ft. from SE line of F. Edmundston Sur.
Abd. 1,805 ft.

CAESER—BEE COUNTY

Falvey et al's No. 1 J. J. Grissom, 150 ft. N and W lines of 771.9-ac. of McEarly Sur.
Cored saturated sand 3,025 ft.; preparing to test.

PETTUS—BEE COUNTY

Houston Oil Co.'s No. 5 Newman, 660 ft. N of No. 4.
Moving in.

TULETA—BEE COUNTY

Blanco Oil and Buchanan's No. 2 Peves, 300 ft. from S and E lines of their 100-ac. "A" lease.
Drilled plugs 3,924 ft.
Heyser, Heard & Walton's No. 1 Peres, C. of Blk. 9, of SE Sec. 8.
T.D. 4,004 ft.; recompleted at 3,977 ft. for 30 bbls. oil, sprayed with gas.
Heyser, Heard & Walton's No. 1 Walton, C of Blk. 1, Sur. 20.
Spudded.
Edwin M. Jones' No. 2 Robinson, 330 ft. from S line, 990 ft. from E line of SW of Sec. 5.
Location.
Edwin M. Jones No. 1 Silcock.
T.D. 3,928 ft.; I.P. 288 bbls. per day; ¼-in. choke; 350 lbs. tubing pressure; 650 lbs. csg. pressure.
Edwin M. Jones' No. 2 Silcock, 990 ft. W line, 330 ft. N line of S½ NE Sec. 10.
Location.
Edwin M. Jones' No. 4 Skinner & Harris.
Derrick.
Edwin M. Jones' No. 5 Skinner & Harris, 330 ft. E line, 990 ft. S line of E½ NW Sec. 10.
Drlg. 3,200 ft.
Houston Oil Co.'s No. 1 Ed Strauss, C of Blk. 2, SW Sec. 9, Uranga grant.
Set 7-in. csg. at 5,950 ft.; W.O.C.
Mills Bennett's No. 2 Harris, 990 ft. from E line, 330 ft. from S line of tract.
Location.
Mills Bennett's No. 1 Roper, SW offset to No. 1 Silcock.
T.D. 3,955 ft.; comp.; no gauge.
Mills Bennett's No. 2 Silcock, 330 ft. from S and E lines of 160-ac. tract.
Location.
Mills Bennett's No. 1 Tuleta Mercantile Co., 330 ft. from N and W lines of SW Sec. 10.
Spudded.

HOCH—BEXAR COUNTY

H. J. Trawalter's No. 7 fee, 150 ft. from N line, 450 ft. from E line of 202-ac. tract in S. Jett Sur. No. 53.
Standing 450 ft.

ALTA MESA—BROOKS COUNTY

Mrs. Florence East's No. 1 G. Madrigal, 800 ft. S line, 300 ft. E line of Share "B," R. G. Salinas grant.
Drlg. 2,100 ft.
Mrs. Florence East's No. 2 Madrigal, 2,970 ft. S line, 990 ft. W line of Share "B," R. G. Salinas grant.
Standing 120 ft.

DALE—CALDWELL COUNTY

McNeil Pet. Co.'s No. 1 J. M. Mears, 660 ft. NW line, 700 ft. SW line of 327-ac. tract in W. C. Swearingen Sur.
T.D. 2,039 ft.; showed little oil.

DUNLAP—CALDWELL COUNTY

Moseley's No. 1 J. M. Pierce, 150 ft. E. line, 400 ft. S line of G. C. and W. P. Walker tract, Seale Sur. No. 3.
Coring chalk 2,203 ft.

GOVERNMENT WELLS POOL—DUVAL COUNTY

Brown & Nessly's No. 3 Runnels, 330 ft. S line, 990 ft. W line of NE NW Sur. 62.
Location; (reported drilling in error).
Edgington & Murray's No. 1 C. W. Hahl, 330 ft. N and E lines, Blk. 16, Sur. 250.
Skidding rig; standing 250 ft.
Government Wells Oil Co.'s No. 10 Lundell (State), 660 ft. S of No. 8.
Location.
Magnolia Pet. Co.'s No. 2 Duval County Ranch, 330 ft. from S line, 990 ft. from E line of Sur. No. 57.
Derrick.
Magnolia Pet. Co.'s No. 4 Hahl-Burch, 330 ft. S line, 990 ft. E line of SW Sur. 43.
W.O.C. 43 ft.
Magnolia Pet. Co.'s No. 3 D. Ruiz, 672 ft. W line, 736 ft. NW line, Sur. 137.
Location.
Magnolia Pet. Co.'s No. 6 M. Ruiz, 330 ft. SE line, 743 ft. SW line, Sur. 574.
Rigging up.
Magnolia Pet. Co.'s No. 1 A. Herbst, 330 ft S and E lines of Sur. 70.
Drlg. 2,900 ft.
Newton & Andrews' No. 1 Bows, 330 ft. S and W lines of Blk. 21, Sur. 250.
S.D. 2,321 ft.; small show of oil.
Salt Dome Oil Co.'s No. 1 Moody, 330 ft. from N line, 1,870 ft. from W line of Sur. No. 60.
Testing sand 2,373 ft.
Smith & Story's No. 12 Lundell, 330 ft. S line, 990 ft. W line of Sur. 48.
S.D. 1,510 ft.
Texas Co.'s No. 12 D.C.R.C., 1,500 ft. S line, 480 ft. W line of SE of Sur. 362.
Testing 2,287 ft.
E. R. Thoas' No. 1 Bishop Cattle Co., 2,325 ft. E line, 330 ft. N line of S½ of Sur. 135.
Location.

HOFFMAN—DUVAL COUNTY

Southwest Drlg. Co.'s No. 1 Cuellar, 330 ft. SW and NW line of NE of Sur. 114.
Drlg. 1,450 ft.

DARST CREEK—GUADALUPE COUNTY

Grayburg Oil Co.'s No. 1 Appling, 150 ft. W of E cor. of 15-ac. tract in J. Hodges Sur.
Abd. 2,652 ft.

LUCAS—LIVE OAK COUNTY

Houston Oil Co.'s No. 30 Cartwright, 1,030 ft. N of No. 26.
Rigging up.
Lion Oil & Ref. Co.'s No. 2 McNeil, J. Curry Sur., 660 ft. N of No. 1.
T.D. 6,025 ft.; P.B. to 4,302 ft.; making wtr., oil and considerabl egas; tubing pressure 925 lbs.; csg. pressure 1,150 lbs.

SAM FORDYCE—HIDALGO COUNTY

W. E. Butler's No. 1 F. B. Guerra, 93 ft. N line, 294 ft. S and W lines of 3.5-ac. tract in Tract 254, Por. 39-40.
Location.
Jack Clements' No. 1 Felipe Farias, 150 ft. from N and E lines of Share 273, Por 39, Reynosa.
T.D. 2,804 ft.; tested 300 lbs. on tubing, 200 lbs. on csg.; no report.
Cosmo Pet. Co.'s No. 1 F. B. Guerra, 330 ft. W line, 130 ft. N and S lines of N 25-ac. of S 100-ac. of E 290-ac. of Tract 254, Por. 39-40.
T.D. 2,796 ft.; comp. as gasser; capped.
Danvers-Harrison & Davis' No. 1 Dr. Austin, center of E 7.2-ac. of S 14.4-ac. in Share 282, Por. 39.
Location.
Davis & Harrison's No. 1 Smith, S offset to No. 1 Guerra, of D. & H.
Drlg. 1,400 ft.
Porter Evans' No. 1 David Flores, Tract 262, Por. 38.
S.D. 2,230 ft.
Heep Oil Co.'s No. 3 Seabury, SE 26-ac. of Tract 256, Por. 38.
Spudded.
Henshaw Oil Corp.'s No. 1 Seabury et al, C of SW 11.5 acres of NE 45.25 acres, Tract 256, Por. 38.
Location.
T. I. Larson's No. 1 G. G. Salinas, 330 ft. S and W lines of Share 10, Por. 41.
Standing 3,000 ft.
Moncrief & Showers No. 1 Edinburg State Bank, 303 ft. N line, 165 ft. E line of Tract 276, Por. 40.
T.D. 2,762 ft.; comp. 35 bbls. per hr.; ¼-in. choke.
Moncrief & Showers' No. 2 John Lawrence, 305 ft. N line, 241 ft. E line of 13.5-ac., Tract 274, Por. 39.
Moving in derrick.
Moncrief & Showers' No. 1 C. E. Smith, Tract 3-B, Por. 41.
Moving in machinery.
Moss & Bass et al's No. 1 F. B. Guerra, 245 ft. N line, 300 ft. W line of 25 acres of S 50 acres of E 290 acres, Tract 254, Por. 40.
Location.
Navarro Oil Co.'s No. 1 Flores, Tract 275, Por. 40, 3,000 ft. SE of discovery well.
Rigging up.
Navarro Oil Co.'s No. 2 Seabury, 330 ft. S and W lines of N 25-ac. of SE 51-ac., Tract 256, Por. 38.
Sand 2,756-64 ft.; drilled plugs and is C.O.
Phillips Pet. Co.'s No. 1 Seabury et al, Tract 278, Por. 40.
T.D. 2,815 ft.; perforated at 2,702-11 ft. for 30,000,000 ft. of gas.
Hiram Reed's No. 1 Farias, Tract 268, Por. 39.
T.D. 2,802 ft.; I.P. 80 bbls. per day; 1/16-in. choke; 275 lbs. tubing pressure.
Rogers O. & G. Co.'s No. 1 Guerra.
Drlg. plugs 2,760 ft.
Sam Fordyce Oil Co.'s No. 2 Smith, 630 ft. N line, 164 ft. E line of NE 34.43 acres of Tract 278, Por. 40.
Moving in rig from No. 1.
Ed Sullivan's No. 1 E. B. Guerra, center of NE 10.77 acres of SW 40.7 acres of Tract 254, Por. 39.
Location.
Van Dresar et al's No. 1 W. R. Jackson, 330 ft. from N and W lines of 92-ac. tract, Por. 38-39-40, Blk. 273.
Location.
Weekly Oil Co.'s No. 2 Smith, 630 ft. N line, 164 ft. E line of NE 34.43-ac. in Tract 278, Por. 40.
Location.
Otto Woods' (Kingwood) No. 4 F. B. Guerra, 330 ft. S and E lines of NW 30 acres of S 150 acres, Tract 254, Por. 39.
Moving in derrick.
Otto Woods' No. 4 John Lawrence, 330 ft. from E line, 250 ft. from S line of W 40 acres. Tract 274, Por. 39.
Rigging up.
Otto Woods' (Kingwood) No. 5 John Lawrence, 165 ft. W line, 235 ft. N line of Tract 274, Por. 39.
Moving on.

SANDIA—JIM WELLS COUNTY

O. W. Killam's No. 4 Wade, ¼ mile N of No. 3 Wade.
Moving in rig.
Walsh & Long's No. 1 Allen.
Drlg. 2,000 ft.

SEELIGSON—JIM WELLS COUNTY

Magnolia Pet. Co.'s No. 5 Seeligson ,1,320 ft. N, 660 ft. E of No. 2 well on Farm 1, Blk. 4 of Canalas Sur.
Drlg. 2,000 ft.

JACOB POOL—McMULLEN COUNTY

American Gas Co.'s No. 1 L. Jacobs Corp., 350 ft. W of SE cor., 100 ft. SE line of tract in Fadden Sur.
Spudded and S.D.
Loma Oil Co.'s No. 32-A Jacob, 660 ft. S of No. 31-A.
T.D. 974 ft.; completing.
Motes & Bettingfield's No. 3 Lark, 660 ft. S of No. 1 and 330 ft. W line of lease.
Drlg. 315 ft.
Newton et al's No. 1 Murphy, SW cor. of Sur. 480.
Drlg. 1,610 ft.
L. D. Ormsby's No. 1 Jacob Corp., Sur. 54.
Drlg. 564 ft.
Stewart & Holding Co.'s No. 3 Jacob, 660 ft. S and 660 ft. E of No. 2, John Fadden Sur.
T.D. 895 ft.; S.D.
West & Witherspoon's No. 1 Lark.
Drlg. 925 ft.

SINTON—SAN PATRICIO COUNTY

Heep Oil Corp.'s No. 2 R. Welder, 466 ft. from S line, 2,000 ft. from Eline of Adline Welder tract in Victor Loupsey Sur.
Derrick.
Humble O. & R. Co.'s No. 1 Welder, NW of Circle W. Oil Co.'s 150-ac. lease.
Location.
Plymouth Oil Co.'s No. 2-B Welder, start at SW cor. of "B" lease, thence NW along the W line 2,100 ft., thence 330 ft. NE at R/A.
T.D. 5,387 ft.; cutting drill pipe at 4,350 ft.

LOS OLMOS—STARR COUNTY

J. P. Kennedy's No. 3 Kelsey-Bass, 300 ft. SE of No. 7 Kelsey-Bass in Blk. 7 of Porcions 75, 76 and 77.
Standing 710 ft.

CUEVITAS POOL—STARR COUNTY

Sun Oil Co.'s No. 5-C M. Guerra & Son, 1,320 ft. NE of 4-C La Sacatosa grant.
Location.

RIO GRANDE CITY—STARR COUNTY

Goodwin & Zimmerman's No. 1 Ida Davis, 33 ft. SW line, 576 ft. NW line of Blk. 16, Tract 4, Share 78, Por. 81.
Standing 1,460 ft.

AGUA DULCE—NUECES COUNTY

Clymore Prod. Co.'s No. 1-C Ollie Purl, 660 ft. N and E lines of Lot No. 2, Sec. 7, Peters Subd. No. 2.
Moving in rig.
United Prod. Co.'s No. 1 M. F. Rivera, 330 ft. at R/A N line, 330 ft. R/A E line of Rivera 168.82 acres, Palo Alto Matias Garcia Grant.
Drlg. hard sand 4,062 ft.

SAKET—NUECES COUNTY

Southern Mineral Corp.'s No. 4 Ocher, 1200 ft. S line and 417 ft. E line of Ocher 202.52-ac. tract in Sec. 8.
Derrick.

WEST COLE POOL—WEBB COUNTY

American Liberty Oil Co.'s No. 10-A Bruni, 330 ft. from SW line, 260 ft. from SE line of Sur. No. 6, Arispe Grant Sur.
Drlg. 1,797 ft.
American Liberty Oil Co.'s No. 11-A Bruni, 508 ft. from NE line, 260 ft. from NW line of Sur. No. 8, Arispe Grant Sur.
Drlg. 2,998 ft.
American Liberty Oil Co.'s No. 12-A Bruni, 777 ft. from SW line, 330 ft. from SE line of Sur. No. 6.
Location (corrected).
American Liberty Oil Co.'s No. 8-A Bruni, 883 ft. NW line, 777 ft. SW line of Sur. 6, M. Arispe grant.
Location.
Herman Brown's No. 4 Bruni Est., 418 ft. NE line, 260 ft. SE line, Blk. 7, Sur. 4, Arispe Grant.
Testing 3,438 ft.
Cole Pet. Co.'s No. 33 R. Benavides, 990 ft. SW line, 330 ft. SE line, of Sur. 1
T.D. 3,413 ft.; testing sand.
Foster Barnsley's No. 6 Webster, 150 ft. E line, 510 ft. S line of NE SW Sur. No. 614.
T.D. 3,050 ft.; to set csg.
O. W. Killam's No. 1 Bruni, 200 ft. N and W lines of Blk. 55.
Drlg. 1,933 ft.
O. W. Killam's No. 30 Bruni Est., 330 ft. SE line, 1,437 ft. SW line of Sur. 6, M. Arispe grant.
Coring deeper 3,413 ft.
O. W. Killam's No. 31 Bruni, 2,187 ft. SW line, 150 ft. SE line of Sur. 6.
Location.
Magnolia Pet. Co.'s No. 6 Brennen-Benavides, 33 ft. SW line, 330 ft. SE line of Blk. 49, M. E. Hale Subd., Arispe grant.
W.O.C. 41 ft.
Sun Oil Co.'s No. 3 Bruni, 260 ft. SE line, 418 ft. NE line of Sur. 5.
Drlg. 2,899 ft.

BYERSVILLE—WILLIAMSON COUNTY

Ogden & Reed's No. 1 (2) C. G. Zieschang, 3,500 ft. SE line, 150 ft. SE line of 200-ac. tract in H. White Sur.
T.D. 890 ft.; showed oil, set csg.
G. L. Rowsey's No. 5-A Heep.
Standing 899 ft.
G. L. Rowsey's No. 5-A Sladek, 450 ft. NE line, 325 ft. SE line of 195-ac. tract in B-2 H. White Sur.
Spudded and S.D.

BLAS URIBE—ZAPATA COUNTY

O. W. Killam's No. 9 Bruni, 180 ft. SE line, 400 ft. NE line of Blk. 9, Blas Uribe tract, Borrego grant.
Drlg. 1,497 ft.

JENNINGS—ZAPATA COUNTY

Texas Co.'s No. 61 Whitehead, 16,489 ft. SW line, 1,007 ft. SE line of Cerrito Blanco grant.
Rigging up.
Nordon & Morris' No. 1 Ramirez, 570 ft. SW line and NW line of Blk. 7, Share 20, Por. 91.
Drlg. 149 ft.
S.R.C. Oil Co.'s No. 5-F Cuellar, 280 ft. E line, 1,534 ft. N line of Blk. 21, Sur. 411.
Location.

MARTINEZ—ZAPATA COUNTY

Sulgrave Oil Co.'s (Sun) No. 1 M. B. Gutierrez, 2,960 ft. W line, 1,320 ft. S line of Sur. 162.
Derrick.

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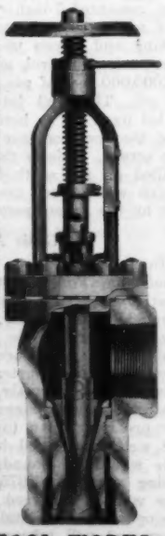

on a well recently completed in the Belridge field in California held and operated under A BACK PRESSURE OF 3400 POUNDS PER SQUARE INCH. These Beans were used both to control flow and for complete shut-off. This is probably the highest well pressure on record and is convincing proof of the dependability of Shaffer Products to meet the severest conditions.

SHAFFER TOOL WORKS
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Among Gulf Coast Drilling Contractors

Cron & Gracey, starting the new year with a bang, released the information that they had purchased five drilling rigs, three large and two of average size, from the Sinclair Oil Co.—comprising all of the rigs which this major operator had located in the Gulf Coast. At present, Cron & Gracey have 11 rigs running or setting up, as follows: One at White Castle, La., on a 6,500-foot contract for Shell Petroleum Corp.; one at Roanoke, La., for Shell Petroleum Corp.; three at Iowa, La., for Shell Petroleum Corp.; one at Barbers Hill for Sinclair Oil Co.; one at Manvel, Brazoria County, for Texas Co., and one in the same field for Cron & Gracey; one on the Seeligson ranch, Jim Wells County, for Sinclair Oil Co.; one rigging up near Fordtran, Victoria County, for Texas Co., and one in East Texas for Cron & Gracey.

George Echols, after several days' struggle with deep prairie mud following the recent heavy rains, has completed rigging up and is drilling for Walter Goldston on a location between Cypress and Satsuma, Harris County. All equipment had to be snaked in with a Caterpillar tractor. Echols is drilling a new location for Houston Oil Co. at Conroe; has two rigs running near Hebbronville, in Jim Hogg County, for Texas Co., and one rig running for the Humble company at Greta.

C. & R. G. Drilling Co. (Gus Cormier), having abandoned No. 1 Frank Truksa, near Alvin, in Brazoria County, has moved rig 1,000 feet west and north and is standing at 800 feet waiting on surface pipe. This new test will be carried to the Frio, and operators anticipate that favorable showings previously encountered in No. 1 Truksa will lead to a new Gulf Coast find. No. 1 Truksa, after standing waiting on orders for several weeks, lost the hole. It was carried to 7,890 feet, and before being shut down, it was anticipated the Frio would be picked up at approximately the same depth, 8,651 feet, at which Harrison & Abercrombie brought in their discovery well at Old Ocean.

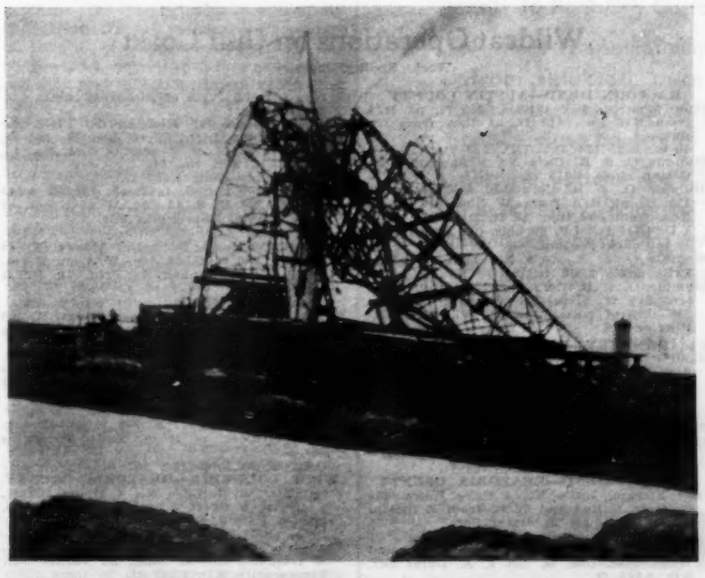
Alamo Drilling Co. is resetting liner and screen in the C. B. Bunte and others' well at Eureka Heights, Houston's most recent city-limits field. On completion of the work-over job, rig will be moved to another location in the field to be drilled for Means & McGehee, previously announced. Same contractors are also moving a second rig from Nueces County to the Eureka Heights Field, to be spotted on a location not yet announced. It is possible these contractors will move a third rig into the field in the new future, which presages some interesting activity in the new field. Alamo is also drilling a well in the Sam Fordyce Field, Hidalgo County, for Means & McGehee.

W. Claud Smith is preparing to complete a well at Tomball for the Texas Co., well being carried as No. 4 Scherer.

Ben (Bud) Coyle, who has just completed a high pressure gas well on the Gillis Dome, near Lake Charles, La., is preparing to deepen this hole in the search for an oil sand. Coyle also has two rigs running on work-over jobs for the Houston Oil Co. in the Ariola Field, Jefferson County.

L. W. Capps has completed a well at Black Bayou, La., for Shell Petroleum Corp., and is moving rig to a new location in the same field for the same company. To complete a 6,000-foot test for Seaport Oil Co. near Huntsville, Walker County, the company has been forced to lay 26 miles of pipe to get water from a creek.

Smith & McDannald have moved a rig to drill No. 5 Ware for the Tide Water and Texas Seaboard Oil companies at Cayuga; and also have moved a rig in the Bosco, La., Field, to drill No. 1 Allemond for the Superior Oil Co. The company has three other rigs running in the Bosco Field for the Superior Oil Producing Co., two rigs running for Pure Oil Co. at Louise, and one rig running for Shell Petroleum Corp. at Roanoke, La.



Oil field photographers, both professional and amateur, have on occasion snapped some interesting oddities, but the picture above, exposed "on the run" by an amateur, reveals a wild Gulf Coast well hurling the drill pipe from the hole. Dimly outlined on the left, just above that portion of the derrick still standing, may be seen a loop of the drill pipe. To the right, above the wreckage, the joint of pipe that was up when the well blew in may be seen spouting mud and gas. The well subsequently caught fire, and gave its owners considerable trouble before it was successfully extinguished and capped. Picture is from the collection of "Cap" McDannald, of Smith & McDannald, who, however, lays no claim to having had a rig over this blowout

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Three New Locations in Hastings Area, Brazoria; More Gas Shows in Waller County Wildcat

By F. L. SINGLETON
Gulf Coast Bureau, The Oil and Gas Journal

HOUSTON, Tex., Jan. 7.—The Hastings area, northeastern Brazoria County, which was proven productive two weeks ago by the completion of Stanolind Oil & Gas Co.'s No. 1 J. W. Surface, received three important locations during the week, which will give some idea as to how large an area this new field is to cover. Two of the locations were made by Stanolind Oil & Gas Co., and the company is building derrick foundations for both tests. Its No. 1 Steve Paul is located 476 feet from the east line and 466 feet from the north line of a 160-acre tract out of the W. T. Hughes Survey, Abstract No. 462, approximately 2,100 feet south of the discovery well. No. 1 William J. Miller is 466 feet out of the southwest corner of the Miller 39.39-acre tract in the W. T. Hughes Survey, Abstract No. 462, approximately 2,000 feet east of the discovery. The other location was made by Showers and Moncrief for their No. 1 Leta Hughey. It is located 5,500 feet northwest of the discovery, in the center of Lot 18, Section 29, H.T.&B. Survey, Abstract 292.

The discovery well was killed the second time in order to recement the joint between the 13⅜-inch casing and the 9⅝-inch casing which showed some leakage, after the operators had cemented the first time. Before the well was killed it showed 200 pounds of pressure on 13⅜-inch casing.

It is reported that the Pan American Pipe Line Co. will lay a 6-inch line from the discovery well to its main trunk line located approximately 8 miles east which extends from Houston to the Pan American Refining Co. at Texas City.

While this new area was receiving its share of locations, two other locations were made in the county. Near the town of Angleton, Luling Oil & Gas Co. made location for its No. 1 Jameson, located 600 feet west of the east line and 750 feet south of the north line of the N. E. Roberts Survey. In the extreme northern part of the county, Big Creek Oil Co. (C.&.R.G. Drilling Co.) made location for its No. 2 Truska. It is 991 feet west of its No. 1 Truska which was junked and abandoned at 7,874 feet and located in the H.T.&B. Survey, Section 7.

Waller County

Stanolind Oil & Gas Co.'s No. 1 J. W. Thorp, southeastern Waller County, an interesting wildcat located in the J. M. Bennett Survey, is coring below 6,925 feet in sand which carries a good gas odor. It topped the sand at 6,921 feet. The test has encountered several sands which showed gas, but has failed to pick up any sand which showed oil. On the San Felipe Dome, Seaport Oil Co.'s No. 1 Avery, a short distance south of the discovery well, in the McFarland Survey, was preparing to drill plug late in the week. It is bottomed in sand at 2,994 feet. Texas Co.'s No. 1 J. H. Jones, on the southeast flank of the dome, is drilling in shale below 2,590 feet. Location is in the William Cooper Survey.

Galveston County

Two interetsing locations were made in the Dickinson area, Galveston County, by Humble Oil & Refining Co. Its No. 1 A. H. and E. H. Schaper is located approximately 4,000 feet southwest of its No. 1-B Maco Stewart, the discovery well, in the center of the south half of Block 15, in the W. K. Wilson Survey, and its No. 1 H. O. and W. G. Jones is approximately the same distance northeast of the discovery in the J. O. S. Sherman Survey. These two locations make the third test to be staked in the area by the company, since the completion of the discovery well. Its No. 1 Danielson, in the John Sellers Survey, is waiting on cement to set at a total depth of 1,966 feet. Thirteen and five-eighths inch casing was cemented at 1,955 feet.

Cleveland Field

One abandonment and one location were reported for the Cleveland Field, Liberty County. Gulf Production Co.'s No. 7-C Kirby, located north of production on the west side of the field, was drilled to a total depth of 5,986 feet and was plugged back to 5,650 feet and redrilled to 5,849 feet, the present total depth. The operators cemented 7-inch casing at 5,843 feet and abandoned the hole after it tested considerable salt water. The company made location for No. 8-C Kirby. It is 933 feet due east of No. 1-C Kirby, and is the first test to be drilled east of the discovery well. Black Gold Oil Corp.'s No. 1 R. D. McDonald, due west of Gulf Production Co.'s No. 6-C Kirby on the west side of the field, in the T. Devers Survey, cemented 10¾-inch casing at 988 feet and is drilling in shale below 3,330 feet. This is the first test to be drilled in the field by an independent company. The county received one new wildcat test, when A. L. Maxwell made location for No. 1 M. P. Hincliff. It is 200 feet from the east line and 1,000 feet from the north line of Section 105, H.&T.C. Survey, Abstract 268.

Montgomery County

Over the line in Montgomery County, two new wildcat tests were preparing to get underway. Walter C. Keeble, trustee, is moving in a rig for his No. 1 T. S. Foster to be drilled in the extreme northeastern part of the county along the Montgomery-San Jacinto County line in the Jose Maria De La Garza Survey. Actual foot measurements are 700 feet east of the west line, and 2,000 feet north of the south line, of Lot 27. Woodard-Smith and Cooper's No. 1 J. V. Scott, in the F. A. Wheeler Survey, is shut down at 1,290 feet, after the operators had cemented casing at 207 feet. Two miles northeast of Montgomery in the John Corner Survey, Reynolds Drilling Co.'s No. 1 Mrs. Clara B. Stewart is coring in shale below 4,160 feet. It cored sand from 4,171 feet to 4,158 feet and from 4,137-52 feet which had a salty taste.

Louise Field

In the Louise Field, Wharton County, Pure Oil Co.'s No. 3 Charles Kountze, made a 10-minute drill stem test from 5,167-89 feet through a one-quarter inch choke and the operators recovered 4 thribbles of salt water and 5 thribbles of mud. It is coring ahead in sand and shale below 5,219 feet. Location is in the Morris and Cummings Survey, Section 9. The same operator's No. 1 G. F. Wharton estate, in the F. Walnut Survey, made a 16-minute drill stem test from 5,147-70 feet through a one-quarter inch choke and recovered 50 thribbles of clean oil and 1 thribble of mud. Pressure built up to 75 pounds while testing. Casing will probably be set after the operators take another 5-foot core.

Kittrell Field

Since the burning well of Humble Oil & Refining Co.'s No. 3 Shaw, in the Kittrell Field, Houston County, was extinguished, all of the producers have gone dead. The discovery well, Boone Brothers' No. 1 Trinity State Bank, which has been flowing approximately 270 bbls. per day since completion, went dead and after the operators had swabbed about 70 bbls. in three hours, it quit flowing altogether. Humble Oil & Refining Co.'s No. 4 Shaw was completed the first part of the week for an initial production of 50 bbls. per hour, flowed for about 3½ hours and then started making nothing but gas. The operators have pulled screen and liner and are preparing to core deeper. It was originally completed at 2,007 feet.

Fort Bend County

Benedum and Trees' No. 1 Jacob Hensler, a wildcat in the southeastern part of Fort Bend County, is preparing to abandon after a drill stem test from 5,828-60 feet showed nothing of importance. The test was originally drilled to 6,500 feet and was plugged back to its present depth, after an electrical coring test showed a sand from 5,828-60 feet with a possibility of production. Location is in the Charles D. Sayre Survey.

Colorado County

Danciger Oil & Refining Co. and L. E. Hultz's No. 1 C. L. Raver, an interesting wildcat test in Colorado County, which has been shut down for some time at 4,590 feet, has started up and will be drilled to the Cockfield sand. The well has been washed down to 4,425 feet, at the top of the old rathole, and it is now shut down while the rig is being repaired. It is located 2 miles west of Garwood, in the B.B.B.&C. Survey, Section 1.

American Liberty Oil Co.'s No. 1 M. M. Graves, a wildcat located on the Aldine-Bammel prospect in the J. W. Bryan Survey, is drilling in shale below 5,240 feet. Based on top the Heterostegina, reported topped at 3,155 feet, it is a normal well compared to the same company's No. 1 Sweeney, a dry hole located due south.

Batson Field

On the southeast flank of the Batson Field, Hardin County, Deering & Burt's No. 1 Jordan in the Willis Donoho Survey, cemented 7-inch casing at 4,850 feet and while the operators were pulling the tubing and screen up the hole, the well blew out of control, making an estimated 50,000,000 feet of gas, with a light spray of oil. The well later sanded up and killed itself. It is bottomed at 4,927 feet and the operators are preparing to reset the screen. This is the second test to be drilled on the south flank of the dome, which was proven productive in November by the same operators' No. 1 Hooks.

Gillis Area

In the Gillis area, Calcasieu Parish, Louisiana, Fohs Oil Co.'s No. 1 O. H. Castle extended the producing limits of the field 1 mile south when it was tested the first part of the week. It came in under a gas pressure of 1,700 pounds through a one-quarter inch choke, but was closed in shortly afterward due to the well showing signs of sanding up as the pressure began to fall. At the time the well was closed in the tubing pressure was 1,000 pounds shut in, and the casing pressure 1,675 pounds shut in. The well is bottomed at 6,917 feet and the operators have pulled screen and settings and will take another core. On a drill stem test made last week from 6,907-17 feet it tested 14 joints of 39 gravity oil on a 14-minute test, and it is expected that the test will make a

Wildcat Operations on Gulf Coast

Week Ending January 5

RACCOON BEND—AUSTIN COUNTY

Humble's No. 6-X Wilson, 315 ft. at R/A from NW line, 313 ft. at R/A from NE line.
16-in. csg. 124 ft.; T.D. 129 ft.

Humble O. & R. Co.'s No. 9 Sherrod.
Coring shale 4,013 ft.

Humble O. & R. Co.'s No. 5-X Helmuth, 315 ft. at R/A from W line, 313 ft. at R/A from SW line, 96 ft. from No. 3.
T.D. 4,119 ft.; I.P. 69 bbls. per hr. through ½-in. choke; comp.

Humble O. & R. Co.'s No. 11-X Woodley.
Drlg. shale 5,810 ft.

Humble O. & R. Co.'s No. 10 Arthur Murten, 315 ft. from SE and 313 ft. from SW line of lease, Wm. C. White Sur.
Rigging up.

DANBURY—BRAZORIA COUNTY

Shell Pet. Corp.'s No. 7 Blakely-Winston, 63 deg. 11 min. E, 5,540 ft. N, 36 deg 49 min. W, 200 ft. from SW cor. of Blakely-Winston 560-ac. tract, H.T.&B. Sur.
Drlg. shale and lime 5,647 ft.

Shell Pet. Corp.'s No. 3 Haury, 300 ft. SE of No. 2 in line with No. 2 and No. 1 Blakely-Winston, H.&T.B. Sur. No. 13.
Drlg. hard sandy shale 7,404 ft.

DAMON MOUND—BRAZORIA COUNTY

Gulf Stream, Inc.'s No. 1 Cave Heirs, 160 ft. from N line and 60 ft. from E line of Lot C, Blk. 50, A. Darst Sur.
S.D. 1,512 ft.

Esco's No. 1-D Wisdom, 25 ft. from S and W lines of Blk. D, Lot 6, A. Darst Sur.
S.D. 1,563 ft.

HASTINGS—BRAZORIA COUNTY

Stanolind O. & G. Co.'s No. 1 W. J. Miller, 466 ft. out of SW cor. of the Miller 3.-939-ac. tract, in A.C.H.&B. Sur. No. 2, 2,000 ft. E of discovery well.
Moving in.

MANVEL—BRAZORIA COUNTY

Bowles & Barsodi's No. 1 Norvell Investment Co. in center of Lot 47, H.&T. Sur., No. 23.
Drlg. 5,433 ft.

Stanolind O. & G. Co.'s No. 1 Steve Paul, 476 ft. from the E line and 466 ft. from N line of 160-ac. tract, A.C.H.&B. Sur. No. 2, 2,100 ft. S of discovery well.
Moving in.

Texas Co.'s No. 13 Houston Oil Field Association, 990.5 ft. N, 48 deg. W, 265 ft. N, 42 deg. E of S cor. of Lot No. 11, A.C.H.&B. Sur. No. 91.
Drlg. sandy shale 3,527 ft.

Texas Co.'s No. 3 O. L. Rash, 990 ft. S, 48 deg. E, 330 ft. S, 42 deg. W of N cor. of lease, Thomas Sproggins Sur.
Drlg. sand 4,221 ft.

Texas Co.'s No. 1 Dolmolin, 330 ft. N, 48 deg. W, 330 ft. S, 42 deg. W, from E cor. of Charles O'Donnell Sur. No. 74, H.T.& B. Sur.
Drlg. shale 5,354 ft.

Texas Co.'s No. 1 Joe Grace, 300 ft. S, 300 ft. W of NE cor. of lease, Lot 7, Charles O'Donnell Sur. No. 74.
Drlg. gumbo and boulders 2,063 ft.

Texas Co.'s No. 15 Houston Oil Field Association, 441.9 ft. W and 247.5 ft. S of NW cor. of Lot 7, A.C.H.&B. Sur.
Drlg. shale and lime 2,811 ft.

Texas Co.'s No. 1 Wray, 330 ft. N, 42 deg. E of W cor. of lease, Thos. Sproggins Sur.
Drlg. shale 5,680 ft.

WEST COLUMBIA—BRAZORIA COUNTY

Sterling O. & R. Co.'s No. 4 Hogg, 200 ft. S of No. 1, 50 ft. from W line of lease, Martin Verner Sur.
Drlg. shale and lime 4,215 ft.

Texas Co.'s No. 34 Hogg, 3,483 ft. N, 50 ft. W from SE cor. of lease, M. Varner Sur.
Temporarily S.D. 5,242 ft.

BARBERS HILL—CHAMBERS COUNTY

Moody Corp.'s No. 1-C E. W. Barber, 302 ft. from N line and 312 ft. from E line of "P" lease, H. Griffith Sur.
Drlg. sandy shale 3,518 ft.

Humble O. & R. Co.'s No. 7-B Kirby, 200 ft. W of No. 6 in Henry Griffith League.
Drlg. 5,167 ft.

Sun Oil Co.'s No. 10 Chambers, 50 ft. from N and W lines of lease.
Drlg. sandy shale 3,815 ft.

Sun Oil Co.'s No. 17 Wilburn fee, 188 ft. E of W line and 40 ft. S of N line and 120

(Continued on Page 74)

producer after it takes in another few feet of sand and screen is reset.

Eight wildcat tests being drilled on various prospects throughout the Louisiana Gulf Coast have reached interesting depths, and are being watched with considerable interest. The deepest test is Humble Oil & Refining Co.'s No. 1-B Industrial Lumber Co. on the Lunita prospect northeast of Starks in Calcasieu Parish. Late in the week it was coring in shale below 9,433 feet. Location is in Section 27-8s-12w. Two miles east of Vinton, Section 13-10s-12w, Plummer and McDaniel's No. 1 Coburn-Hood, is drilling in shale below 6,490 feet. Wheeler Oil Corp.'s No. 1 Gabbert, Section 28-9s-7w, is below 7,050 feet in sandy shale.

In Jefferson Davis Parish, George W. Strake's No. 1 Calcasieu National Bank, 3 miles northwest of the Welsh Field, Section 12-9s-6w, is drilling in shale below 7,570 feet.

Acadia Parish

On the Crowley prospect, Acadia Parish, Humble Oil & Refining Co.'s No. 1 American Rice Mills, Section 27-10s-1e, is drilling in sandy shale below 7,544 feet. A showing of oil was encountered in the test from 5,690-5,709 feet. Avalon Oil Co. and Superior Oil Producing Co.'s No. 1 A. S. Newman, in the northwestern part of the parish is drilling in sand and shale below 5,827 feet. Location is in Section 24-7s-1w.

In Cameron Parish, Stanolind Oil & Gas Co. is reported to have acquired several thousand acres of prospective leases, along Grand Chenier ridge, in the southeastern section of the parish.

Gulf Refining Co.'s No. 16 Irwin, on the east flank of the East Hackberry Field, Cameron Parish, opened up the ninth producing horizon for the field, when it was completed for an initial production of 1,000 bbls. per day through a three-eighths inch choke from a total depth of 6,743 feet. The nine proven producing sands in the area, range from 6,000 to 7,500 feet.

New Roanoke Sand

A new productive sand was opened up in the Roanoke Field, Jefferson Davis Parish, when Humble Oil & Refining Co. Completed its No. 1 Taylor for an initial production of 1,500 bbls. per day through a three-eighths inch choke with tubing pressure 1,425 pounds and casing pressure 1,725 pounds, from a total depth of 7,830 feet. The other two producers, Humble Oil & Refining Co.'s No. 1-B Devilbiss, and Shell Petroleum Corp.'s No. 1 Kratzer, the discovery, are producing from 7,918 feet and 8,677 feet respectively. Humble Oil & Refining Co.'s No. 3 Devilbiss, three-quarters of a mile southwest of the discovery well, is waiting on cement to set at a total depth of 9,425 feet. Seven-inch casing was cemented at 9,310 feet. The company's other deep test, No. 1 Jarnigan, Section 12-9s-4w, is coring in shale and lime below 9,425 feet. Shell Petroleum Corp.'s No. 1 Jarnigan, east offset to the discovery well, is coring in shale below 9,612 feet.

In Tangipahoa Parish, R. A. Compton has made location for a wildcat test in Section 19-5s-9e, in the northeast quarter of the parish, actual foot measurements are 200 feet west and 200 feet north of the southeast line of the NE Section 19.

First 10,000-foot Test

The Gulf Coast received its first 10,000-foot test during the week, when Superior Oil Producing Co.'s No. 1 Auguste Martinez, located in the southeast part of the Bosco Field, Acadia and St. Landry Parishes, drilled to 10,002 feet in sand and shale, and is now shutdown, while the operators are mxing mud at that depth. The two deepest tests to have been drilled prior to the Bosco test, were drilled by Yount Lee Oil Co. in Chambers and Liberty Counties. The deepest test was its No. 1 E. W. Boyt in Liberty County, which was abandoned at a total depth of 9,867 feet. The other test was drilled on the same prospect, but is located in Chambers County. It was abandoned at 9,334 feet.

Wirt Franklin Comments on Oil Industry Outlook

By WIRT FRANKLIN

President of the Independent Petroleum Association of America

"The domestic petroleum industry will continue to lead the way back to normal business conditions in 1935 if Congress grants the almost unanimous request of that industry for such federal aid in regulation of sources of supply, including production, imports, and storage withdrawals, as will prevent a return to those demoralized conditions which almost wrecked this industry a few years ago.

"The Independent Petroleum Association of America, the only national association of independent oil men embracing all branches of the industry, the Planning and Coordination Committee, the recognized official spokesman for the oil industry, and numerous state, local or specialized associations of independents and majors alike have endorsed the policy of federal assistance in preventing wasteful and demoralizing overproduction. The National Resources Board in its recent report emphasizes the necessity for control of production and competitive practices, especially referring to oil.

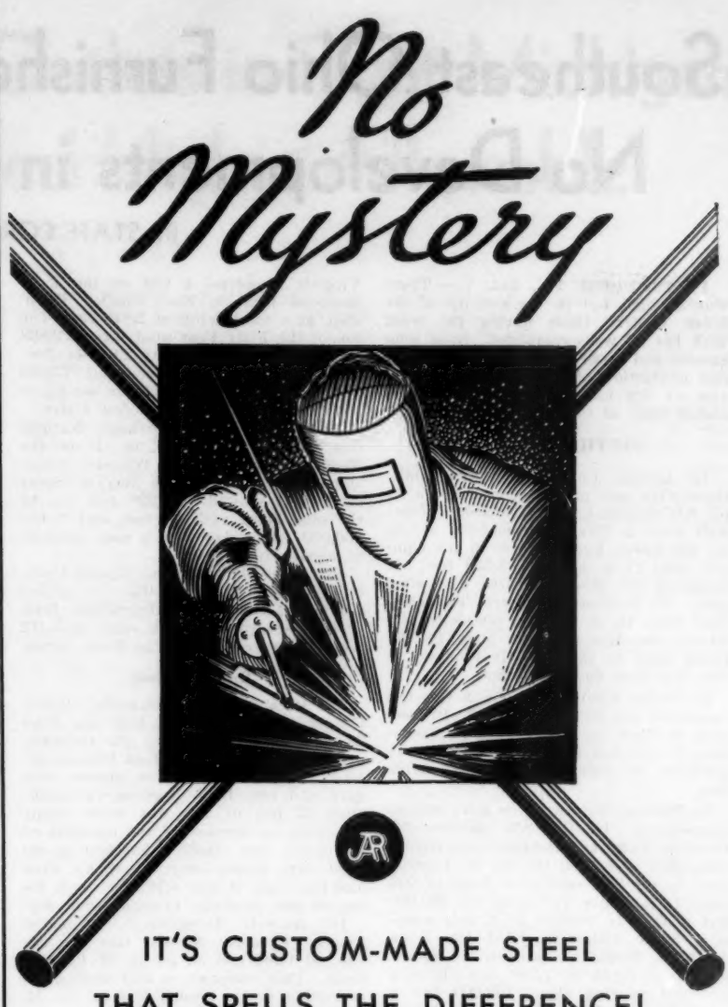
"It is incredible that any substantial portion of the oil industry wants to abandon the policy of production supervision now in effect in spite of published articles to the contrary.

"Only through balancing production with consumptive demand can this industry continue its successful re-employment program, add millions of dollars to the purchasing power of the oil producing states, and carry the tremendous burden of local, state and federal taxes which makes it probably the most important single source of revenue.

"The hot oil producers who were enriching themselves by draining the oil belonging to their law abiding neighbors, are smarting under the improved control of their activities by the federal authority and are now endeavoring to poison the sources of information influencing the minds of the public against continued regulation by raising the cry of regimentation under federal control. Published articles, which quote no authority for their statements, give the impression that the independents and the major companies alike are fighting the proposed preservation of the industry by the federal government. The truth is that the independents in the industry are actively supporting federal assistance in control of sources of supply of petroleum and its products, not because they desire government regimentation, but because they realize that only the federal Government can make fair allocations to the oil producing states, unaffected by political pressure, prejudice, or other influences. Representatives of the major companies who belong to the Planning and Coordiation Committee have also voted their support of a federal control measure.

"The only practical alternative to regulation of petroleum supplies through federal support is the return to conditions which prevailed before the adoption of the oil code when petroleum was selling as low as 10 cents a barrel, former workers in the oil industry were in the ranks of the unemployed, oil companies were bankrupt or in financial difficulties, and the purchasing power of 20,000,000 people in the oil states greatly impaired by the prostration of this, the second in the nation's industries.

"The only ones who would profit by the uncontrolled production of this valuable and irreplaceable natural resource would be the hot oil group, a few exporters of petroleum products, and possibly some of the larger and richer companies, but none of these would profit in the long run since the wreckage of the whole national recovery program, which would be involved in the ruin of the oil industry, would sweep away the temporary gains they might make in the brief period before a universal demand invoked drastic regulation or nationalization of the oil industry to replace the chaos which would be prevented by the moderate legislation now proposed."



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Southeast Ohio Furnishes Most of New Work; No Developments in Oriskany Sand Tests

By STAFF CORRESPONDENT

PITTSBURGH, Pa., Jan. 7.—There was a slight lull in the activity of the lower Eastern fields during the week with but 16 wells completed. Nine were gassers and seven producers with an initial production of 53 bbls. There were also six dry holes. Southeast Ohio furnished most of the new work.

SOUTHEAST OHIO

In Licking County, Southeast Ohio, there were two producers completed. In the NW Section 6, Perry Township. Hopewell Fuel & Gas Co. completed a test on the Ralph Vroome farm in the Clinton sand at a depth of 3,250 feet. It produced 20 bbls. the first day after shot. In Section 17, Perry Township, Blue Rock Oil & Gas Co. completed No. 10 on the Walter Hoyt farm in the Berea sand at 738 feet. It produced 6 bbls. the first day after shot.

In Medina County, Oko Oil & Gas Co. completed No. 32 on the T. W. Brinker farm in Tract 14, Lot 6, Chatham Township, in the Berea grit at 367 feet. It produced 10 bbls. the first day after shot.

In Monroe County, there were several completions. In the SW Section 16, Franklin Township, Robinson and Greene completed a test on the N. M. Leasure farm in the Salt sand at a depth of 995 feet. It is a gas well good for 250,000 feet a day. In Section 3, of this township, S. A. Cobb completed No. 3 on the J. W. McElfresh farm in the Squaw sand at a depth of 1,590 feet. It is a gas well gauging about 100,000 feet a day. In the NW Section 7, Benton Township, E. H. Homestead completed a test on the Isaac G. Moore farm in the Injun sand at a depth of 1,698 feet with about 150,000 feet a day. In the NW Section 27, Green Township, David Crawford and others completed No. 5 on the Forrest and Minnie Schlabach farm in the Cow Run sand at a depth of 513 feet. It will make about a half-barrel pumper after shot.

In Morgan County, Charles D. Mosher and others completed No. 7 on the Charles Yarnell farm in the central part of Section 1, Windsor Township, in the Cow Run sand at 539 feet. It is making about 5 bbls. a day, natural. In the southern part of Section 11, same township, Kelvin Corp. drilled a test on the E. E. Ross farm through the Cow Run sand to 595 feet. It was dry.

In Noble County, NE Section 16, Elk Township, E. A. Metcalf drilled a second test on the H. W. Pabst farm through the lime to 1,185 feet. It was dry.

In Washington County, W. S. Harris completed a second test on the Dille heirs farm in the southern part of Section 3, Wesley Township. It is a gas well, gauging about 400,000 feet a day, from the Salt sand at a depth of 932½ feet. In Palmer Township, in the southern part of Section 14, G. E. Morris and others drilled No. 33 on the Effie M. Burt farm through the Cow Run sand to 411 feet. This formation was dry but it will make about a half-barrel producer from the Peeker sand at 351 feet. In the same township and the southwestern part of Lot 1,078, M. A. Martin and others drilled a second test on the John Work farm through the Cow Run sand to 635 feet. It was dry.

SOUTHWEST PENNSYLVANIA

There were two gas wells completed in Southwest Pennsylvania and there was also one dry hole. In Washington County, the Natural Gas Co. of West Virginia completed a test on the J. C. Sampson farm in East Findley Township, at a total depth of 2,849 feet. The top of the Fifty Foot sand was at 2,838 feet with gas showing at 2,840-44 feet. The gas, which includes about 75,000 feet a day from the Big Injun sand, has a volume of about 567,000 feet a day.

In Greene County, Carnegie Natural Gas Co. drilled deeper No. 1 on the Thomas Brewer farm in Whiteley Township, to 3,301 feet, the Bayard Stray sand. Gas showed at 3,228 feet, top of the sand being at 3,226 feet, and it has 150,000 feet a day with a rock pressure of about 710 pounds.

In Springhill Township, Greene County, Dunn Marr Oil & Gas Co. drilled No. 1 on the J. W. Hutchinson farm deeper through the Fifth sand to 3,312 feet. It proved dry in the lower sands.

Oriskany Test

In Muddy Creek Township, Butler County, where James H. Duff and John T. Galey are drilling to the Oriskany sand on the Lehigh Portland Cement Co. lease, the Onondaga lime proved very hard and very little progress was made. Only 72 feet of hole was made during the week on account of the hardness of the cherty lime. Drilling has been in the hard dark brown cherty lime all week and the depth is now 4,762 feet with the cap of the Oriskany expected each day.

In Amwell Township, Washington County, Carnegie Natural Gas Co. has reached 1,165 feet on the R. M. Carrons farm. This company is still shut down cementing in the second test on the M. C. Manon farm. Wise Oil & Gas Co. has reached 2,835 feet on the Jacob Snyder farm. F. K. Fawcett is drilling on top of the sand on the J. C. and Anne Phelan farm. The depth is 2,635 fee.t

In East Findley Township, Washington County, the Natural Gas Co. of West Virginia has started drilling on the T. F. Ealy farm. Its test on the G. W. Tilton farm has reached 1,100 feet and drilling. In Franklin Township, Carnegie Natural Gas Co. is drilling in the Fifth sand in No. 1 on the S. A. Dague farm, which is being drilled deeper. The depth is 2,996 feet.

In Greene Township, Greene County, John Lantz has started to drill deeper No. 1 on his own farm. It was drilled through the Big Injun sand to 1,890 feet. Top of the Injun sand was at 1,725 feet with oil and water showing at 1,837 feet. It was not practical to pump off the water which showed too great a volume. The present depth is 1,918 feet.

WEST VIRGINIA

There was only one producer completed in West Virginia. On Fish Creek Run in Union district, Marshall County, Carnegie Natural Gas Co. completed the second test on the C. E. Yeater farm in the Injun sand showing for 10 bbls. a day.

In Elk district, Kanawha County, where several tests are drilling to the Oriskany sand which has proved productive on the Burdette farm, the deepest was halted with a cementing job. S. B. Avis, trustee, has shut down at 4,060 feet cementing on the W. T. Copen heirs farm. V. C. Smith and others are drilling at 1,515 feet on the island at the mouth of Coopers Creek, the Matheney, Wertz and others lease. Clyde Oil & Gas Co. has reached 1,330 feet on the F. W. Shinn farm. Benedum and Trees are spudding on the Mary C. Wingfield farm. Elk River Oil & Gas Co. is down 200 feet on the W. T. and J. H. Goshorn farm. The Oriskany should be reached at about 4,800 feet.

Gas Wells

In Clay County, F. F. McIntosh completed a test on the Peabody Coal Co. lease in Pleasant district, at a depth of 1,088 feet. It is showing for 250,000 feet a day. In Otter district, Benedum and Trees are shut down at 2,710 feet on the Andrew Tanner farm.

In Lincoln County, David Gas Co. completed a test on the Alma Collins farm in Jefferson district in the Berea sand at a depth of 2,424 feet. It is a small gas well gauging about 60,000 feet a day.

In Marion County, Maxon Oil & Gas Co. completed the test on the Ash heirs farm in Mannington district in the Bayard sand at a depth of 3,415 feet. It will make a small gas well.

There were two dry holes in West Virginia. In Calhoun County, Harley Jarvis and others drilled a test on the Clark Wilson farm in Washington district through the Salt sand to 1,550 feet and it was dry.

In Roane County, Kenney M. Hunt and others drilled a test on the Clara Kelley farm, mapped as the Oscar Kelley farm, in Harper district, through the Salt sand and it was also dry.

Drilling in West Virginia

In Cabell County, only two wells are actively drilling. In Grant district, Shale Gas Co. is down 900 feet on the Bracy Beckett farm. In McComas district, R. H. Adkins and others have reached 1,900 feet on the F. F. Starcher farm. In Grant district, West Virginia Gas Co. is drilling deeper No. 1 on the Sarah J. Kendall farm and has reached 3,025 feet drilling in the Brown shale.

In Calhoun County, Southeastern Gas Co. is rigging up on the Rosa Daubins farm in Center district. Howard Brothers shut down testing No. 1 on the L. F. Norman farm at 2,010 feet. In Sherman district, F. F. McIntosh has reached 1,950 feet on the Seymore Settle farm. Godfrey L. Cabot, Inc., has resumed drilling No. 1 on the Henry Knight farm and is at 850 feet. Starcher and Richards have started drilling on the Graybill heirs farm. In Lee district, Mudlick Oil & Gas Co. is drilling No. 2 on the G. W. Bennington farm at 1,740 feet. M. F. Crawley is down 900 feet on the Lester and Riggs and others lease. Five wells are actively drilling in Washington district. Henderson Oil Co. is down 1,960 feet on the Parson heirs farm. Jarvis Gas Co. has started drilling on the C. L. and G. W. Jarvis farm. Everett Starcher is down 470 feet on the Lubana J. Jarvis farm. Howard Jarvis and others are fishing at 250 feet on the J. S. Rogers farm. Carroll and Hamilton have reached 1,350 feet on the E. C. Knott heirs farm.

In Gilmer County, McCall Drilling Co. is drilling a second test on the E. G. Rohrbaugh farm in Center district, and has reached 1,400 feet. In DeKalb district, Hope Construction & Refining Co. shot and cleaned out No. 3 on the Mollie B. Woodford farm and increased production from 2 to 5 bbls. a day.

In Kanawha County, Godfrey L. Cabot, Inc., is down 3,625 feet in No. 8 on the Campbells Creek Coal Co. tract in Malden district. In Cabin Creek district, this operator is drilling at 2,950 feet old No. 3 on the A. D. Huntington farm which is being reclaimed.

In Pleasants County, Tyler Oil Co. has made a location on the William Johnson farm in Union district. In McKim district, Ward and others are down 1,400 feet in No. 20 on the George Varner farm.

In Raleigh County, Godfrey L. Cabot, Inc., has reached 1,209 feet in No. 6 on the Beaver Coal Co. property in Slab Fork district, and 868 feet in No. 7.

In Ritchie County, on Stewarts Run in the Hughes River Pool, W. Bickerstaff has started drilling on the Frank Keith farm, Clay district. In this district, close to the Pike Pool, Lucky Strike Oil Co. is drilling at 2,112 feet on the L. E. Robinson farm. In Pike Pool, proper, Lucas and Mahaney are drilling No. 4 on the J. F. and Laura Kelley farm and are at 900 feet. The three wells on this farm are all fair producers. In Murphy district, W. R. Hays and others have reached 1,500 feet on the M. J. Livingston farm, a test. O. J. Stout reached 1,800 feet and shut down

(Continued on Page 63)

Administrator's Report on Crude Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended December 29, 1934, totaled 322,262,000 bbls., a decrease of 1,474,000 bbls. from the total of 323,736,000 bbls. on hand at the end of the preceding week, Harold L. Ickes, Secretary of the Interior and administrator of the code of fair competition for the petroleum industry, announced today. This decrease, which followed a decline of 524,000 bbls. during the previous week, comprised decreases of 1,381,000 and 93,000 bbls., respectively, in stocks of domestic and foreign crude oil.

Current reports of the industry indicate that crude oil production showed a slight increase, the daily average being about 2,488,000 bbls., as compared with about 2,480,000 bbls. for the previous week. Imports of crude oil showed a material decline, the daily average amounting to 98,000 bbls., as compared with an average of 142,000 bbls. for the week ended December 22. Daily average crude runs to stills amounted to 2,600,000 bbls., a gain of 15,000 bbls. over the average of the previous week. The estimated daily average balance of crude oil for the week ended December 29 was as follows (barrels): Production, 2,488,000; imports, 98,000; decrease in stocks, 211,000, equals run to stills, 2,600,000; exports, fuel and losses, 197,000.

CRUDE PETROLEUM STOCKS REPORTED BY COMPANIES HOLDING 100,000 BBLS. OR MORE

Grade of crude oil—	Stocks held by reporting companies Dec. 22 (bbls.)	Dec. 29 (bbls.)
Pennsylvania Grade	4,523,000	4,468,000
Other Appalachian	1,000,000	978,000
Lima-N.E. Indiana-Michigan	1,382,000	1,151,000
Illinois-S.W. Indiana	11,470,000	11,454,000
N. Louisiana and Arkansas	9,857,000	9,781,000
West Texas and S.E. New Mexico	30,245,000	30,095,000
East Texas	29,969,000	29,698,000
Other Mid-Continent	151,969,000	150,927,000
Gulf Coast	18,004,000	18,282,000
Rocky Mountain	27,425,000	27,420,000
California	34,480,000	34,679,000
Total domestic crude	320,324,000	318,943,000
Foreign crude	3,412,000	3,319,000
Total crude	323,736,000	322,262,000

With Increased Crude Outlets in Sight Michigan Field Will Soon Need Higher Allowable

By PAUL A. ELLIOTT
Staff Correspondent, Michigan Fields

MUSKEGON, Mich., Jan. 7.—Declining potential of 12 Michigan oil fields in the aggregate, an increasing local refinery market and a slightly increased federal allowable were recognized last week by the Michigan Producers Proration Committee in an increase of 2 per cent from 5 to 7 per cent over a minimum daily exemption of 50 bbls. in the new proration schedule effective as of January 1.

The new schedule will permit the highest percentage of production in four months, or since September, when producers were allowed to run 5 per cent over a minimum of 75 bbls. a day.

A major factor in bringing about the increased allowable per well is believed to be the increasing operations of existing refineries, the completion of several new plants and plans announced for additional new processing units or refineries greatly increasing the home market for Michigan crude.

Several new small plants recently have started production, including Mid-West Refineries, Inc.'s 1,500-bbl. plant at St. Louis, Mich.; Sweet Oil Co.'s 500 to 1,000-bbl. plant at Wyman and Superior Oil Co.'s 750-bbl. plant at Elsie. McClanahan Refineries, Inc., will start operations soon in its new 1,500-bbl. skimming plant at St. Louis, Mich., and the Bay Refining Co. has started construction of a 350-bbl. still in Bay City.

Plans for considerably increasing the capacity of the Naph-Sol Refining Co.'s 2,000-bbl. skimming plant at Muskegon by the erection of a new $200,000 cracking unit and plans for another new cracking plant at Bay City just announced by Del Fortney and others, independent operators in central Michigan fields, also indicate a further increase in Michigan markets for crude during the early months of 1935.

The new Naph-Sol unit is expected to result in an immediate increase of about 500 bbls. a day in crude runs from central Michigan fields, while the capacity of the proposed new Bay City plant has not yet been announced, although the promoters have purchased a seven-acre site. Naph-Sol also is providing for the possible later installation of another cracking unit doubling its new cracking facilities if conditions warrant.

More Crude Needed

Other refineries in operation in Michigan, including the Old Dutch plant at Muskegon, the Pure Oil Co. plant at Midland, the Roosevelt refinery at Mount Pleasant and several other smaller establishments also are calling for more crude.

Prospects are the generally increasing demand will be recognized by Harold L. Ickes, national oil administrator and his staff with a further increase in the federal allowable recently established at 28,100 bbls. a day for the latter part of December and the month of January.

Taking into consideration average daily runs for the last week in December at 27,687 bbls. and estimating the first three weeks on the basis of average daily figures of the Michigan Producers Proration Committee, Michigan's total production for 1934 has been computed at about 10,560,000 bbls., a new all-time high record.

Daily estimates for January, based on actual runs for December, and revised potentials for 12 recognized fields as of January 1 were announced as follows by the proration committee last week:

Pool—	Wells	Potential	Runs
Porter	281	125,605	20,164
Yost	17	4,534	969
Greendale	302	3,595	3,410
Vernon	52	2,210	2,000
Leaton	30	604	604
Montcalm	3	595	331
Beaverton	1	40	47
Ogemaw	29	1,263	551
Saginaw	99	99	99
Lapeer	4	20	20
Oceana	18	212	212
Muskegon	133	285	285
Totals	970	139,062	28,692

Five Wells in the Pay

Despite the shutdown of many drilling wells during the holiday week, five tests were drilled into the oil pay sands of the Dundee formation, two gassers were completed and four dry holes were added to the record in eight townships of seven counties throughout the state.

As in recent weeks, the most important new development was a gas well brought in by W. J. Bernier as his No. 1 Clarence Beebe, C SE SW Section 36-15n-6w, Sherman Township, Isabella County. Located about a mile northeast of the nearest production in Broomfield Township, Isabella County Field, No. 1 Beebe was gauged at 1,960,000 feet a day at a depth of 1,316 feet, where it had barely scratched the Michigan Stray gas sands. Operators expected to increase its flow at least to 3,000,000 feet a day by a little deeper drilling before completion as the first test on a 1,000-acre block.

One other Sherman Township test was shut down, one drilling and two just starting.

The largest new oil producer of the week was Pure Oil Co.'s No. 15 Walter Neitzke, Section 21-13n-1w, Porter Township, Midland County, which made 250 bbls. natural in the Dundee. Limestone was topped at 3,369 feet and the hole drilled to 3,424 feet before operations were suspended to treat with acid. The No. 15 well is the last of 16 drilled on the 160-acre lease, the others making 1,000 bbls. and upward per day.

Four more tests in the West Branch Township, Ogemaw County Field, were drilled into the Dundee pay sands with prospects of commercial production, although none were reported completed.

Robert T. Jones and E. Arthur Durham's No. 1 Russell Miller, SW NE SE Section 20-22n-2e, West Branch Township, made 22 bbls. natural in the Dundee at a total depth of 2,728 feet. Weber Oil Co.'s No. 1 L. Doras, SE SW SE Section 27, same township, had 800 feet of oil in the hole and was drilling 90 feet in the Dundee.

T. F. Caldwell drilled two tests into the Dundee, namely the No. 1 Jessie A. Myas, SW SW NE Section 19, and the No. 2 Ogemaw County Fair Grounds, SW NW SE also Section 19. The former topped the Dundee at 2,578 feet and drilled to 2,742 feet while depth of the latter was unreported.

All four wells are expected to be treated with acid and placed on the pump before initial production figures will be available. Muskegon Oil Corp.'s No. 1 H. Wilson, NW SE NE Section 24-22n-1e, Ogemaw Township, Ogemaw County, which was drilled into the Dundee pay sands several weeks ago, has been delayed in completion by casing trouble. Dundee was topped at 2,628 feet and the hole drilled to 2,768 feet with indications of commercial production.

M. J. Ingold's No. 1 Hobohm and Wheeler, NE NW NW Section 29, West Branch Township, also was drilling into the Dundee with no reports of production as the week closed. Three other West Branch tests were drilling between 1,500 and 2,500 feet, two were deepening from the Traverse to the Dundee, one was spudding and nine were locations or just starting comprising record activity in the newly developing field located about 50 miles north of the Mount Pleasant Field.

Two were rigged in Mills Township, one in Churchill Township and another in Rose Township, all Ogemaw County.

Many New Permits

Of particular interest last week in view of record drilling activity and the large number of new permits recently issued for Ogemaw County by the state conservation department was the announcement of limitation of the new field to 28 new wells during the calendar year 1935 under a plan approved January 2 by Oil Administrator Harold L. Ickes. Ruling of the national administrator also specified "any and all wells hereafter drilled shall be located in accordance with the spacing program of not more than one well to 10 acres."

Approval of plans for developing new oil pools is included in the federal program for conservation of oil resources by arbitrary limitation of drilling activities.

Dry Holes

Four dry holes were added to the record in Michigan during the past week, one each in Porter Township, Midland County, Jasper Township, same county, Bethany Township, Gratiot County, and Lyon Township, Oakland County.

George G. Hanners' No. 2 Free Methodist Church, C SW NW Section 17-13n-1w, Porter-Midland, was being plugged and abandoned after failure to overcome water encroachment in a well which was brought in last November with an initial flow of about 500 bbls. The No. 1 also had to be abandoned for the same reason.

George Hanners' No. 1 C. W. Hoyt, NE NE NE Section 24-13n-2w, Jasper Township, Midland County, also was dry and abandoned after topping Dundee limestone at 3,447 feet and drilling to 3,471 feet. Many months of hard luck attended operations in this hole with four fishing jobs and a skidded rig.

Mid-State Development Co. finally abandoned its No. 1 Edward H. Yost, SW NE SE Section 27-13n-2w, Bethany Township, Gratiot County, after drilling it to the Sylvania formation at 4,426 feet as one of the deeper holes in central Michigan. An Elba Township test in Gratiot is plugging back for shallow gas.

T. F. Caldwell, Inc.'s No. 1 Beecher Mackey, NW SW SW Section 21-11n-7e, Lyon Township, Oakland County, was the fourth "duster" of the week, being abandoned at 1,325 feet.

West Michigan Consumers Co. has decided to complete its No. 6 Fred Figge, SW SW NW Section 9-10n-16w, Muskegon Township, Muskegon County, as a 75,000 to 100,000-foot gasser in the lower Traverse formation at a total depth of 1,882 feet. It had been testing for

Sixteen Completions in Central West; Three Wells Drilling in Tennessee

By GEORGE A. WHITNEY
Staff Correspondent, Central West Fields

FINDLAY, Ohio, Jan. 7.—In the Lima Field a couple of tests were made in Henry County, while not large, show chances to develop large wells by additional drilling. Near Elmore in Lake Township, Wood County, Ottawa Oil & Gas Co.'s test on the Frank Enoch farm, produced 3 bbls. initial at 1,332 feet and the oil found in the Trenton may bring about additional tests. In Allen County, H. F. Kelley and others' No. 1 F. B. Sellers farm, Section 30, Perry Township, had an initial of 8 bbls. In Bath Township, same county, L. J. Pease & Co., trustee's No. 3 C. A. Landis farm, produced 20 bbls., and in the same township, Carmon Oil Co.'s No. 2 T. J. Hadsell farm, Section 13, produced 20 bbls. initial. In Shelby County, A. B. Ernst and others' No. 1 Ahrenst farm, Section 22, Cynthian Township, was dry. Arcanum Oil & Gas Co.'s No. 1 J. Eilerman farm, Section 14, same township, produced 2 bbls. initial, and in Section 9, McClean Township, Charles H. Frank's No. 5 Henry Ernst farm, produced 5 bbls.

Darke County

Wayne Jones has a rig up for No. 2 A. & M. Rohrback farm, Section 2, Salem Township, Darke County, Adrian Tester abandoned No. 1 C. Brown farm, Section 14, Mississnaw Township. In Van Wert County, Mid-Continent Oil & Gas Co.'s No. 1 Frank Brenneman farm, produced 2 bbls. Hystanton Oil & Gas Co. is drilling No. 3 J. A. Reed farm, Section 30, Jackson Township.

CENTRAL OHIO

In the Central Ohio Field there were 16 completions, of which four were oil wells with an initial of 113 bbls., two dry holes and 10 gas wells. In Ashland County, Robison and others' No. 4 Phillip Doerr farm, Section 16, Lake Township, struck a fair gas well at 678 feet. Ohio Fuel Gas Co.'s No. 1 John Lance farm, Section 3, Lafayette Township, Medina County, was a dry hole at a depth of 3,123 feet. Same company is drilling No. 1 on the Roy W. Allis farm, Lot 38, Harrisville Township, same county, and has a location for No. 1 on the Glen A. McFarren farm, Lot 7, Homer Township.

In Coshocton County, Preston Oil Co. is drilling No. 3 on the C. D. Mossholder farm, Lot 3/4, in Newcastle Township. In Licking County, Blue Rock Oil Co.'s No. 10 Walter Hoyt farm, Section 17, Perry Township, produced 4 bbls. initial at 738 feet.

In Muskingum County, Hopewell Oil & Gas Co.'s No. 1 Gertrude Vroom farm. Lot 3, Licking Township, produced 3 bbls. initial. In Brush Creek Township, Fritz Oil & Gas Co.'s No. 1 W. F. Swingle farm, Section 28, is a gas well at 4,092 feet. Pure Oil Co.'s No. 4 on the H. W. Scott farm, Section 3, same township, is nearing completion.

In Belmont County, Barnesville Devel-

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several weeks pending a decision whether to drill on to the Monroe at about 2,100 feet. West Michigan is planning to deepen two more former Traverse or Dundee producers to the Monroe gas sands immediately but has not yet decided their location.

John B. Northcott, of Fremont, Mich., an independent producer, is still working with his No. 2 Jane Pinder, NW NW Section 31-15n-16w, Elbridge Township, Oceana County, reported drilled into the upper Traverse pay sands several weeks ago. It will be shot and treated with acid before completion.

Midland County

Columbia Oil & Gas Co. was still treating with acid before completing its No. 1 Friend Henry Northrup, NE NE SE Section 19, Porter Township, for 500 feet of oil in the hole.

Nine other Porter tests were drilling, none near completion, two were shut down and 14 were moving in, rigging, spudding or skidding for a new start.

Mon-Mar Oil Corp.'s No. 1 Emmett Scott, SE SW NE Section 8-14n-2w, Greendale Township, Midland County, was as yet uncompleted in the Dundee although near production. One other Greendale test was active with four other Midland County wildcats active, one in Mills Township, one in Warren Township and two in Mount Haley.

Isabella County

Considerably increased activity was still evident in Isabella County in eight townships.

Denver Township was in the lead for possible new completions soon with five tests drilling between 1,700 and 3,250 feet as follows: Jackson Meyer Syndicate's No. 1 Hughes, SW SE NE Section 19-15n-3w; Pure Oil Co.'s No. 1-C State of Michigan, NW NE NE Section 33; McClanahan Oil Co.'s No. 1 B. Wonsey, Section 33; Gordon Oil Co.'s No. 1 John Demski, SW NW SE Section 28, and Mammoth Petroleum Corp.'s No. 1 B. E. Johnston, NE E NW Section 33 expected to be completed in the order named.

Arthur R. Morris and Charles Van Keuren's No. 1 J. Hart, SW NW NE Section 18, which was being plugged and abandoned, topped the Dundee at 3,663 feet and drilled to 3,848 feet, testing the Monroe before abandonment.

Mecosta-Montcalm Trend

Michigan Stray gas sands were topped at 1,316 feet and the hole drilled to 1,321 feet in the Columbia Oil & Gas Co.'s No. 1 Arnett, C NW SE Section 23-13n-8w, Hinton Township, Mecosta County, which came in during Christmas week for an open flow capacity of 8,600,000 feet a day. One location also had been made in Hinton and one in Martiny Township.

One was driving pipe in Mecosta Township, two were shut down in Millbrook, material was on location for a new test in Morton Township and one was shut down and two rigged in Sheridan Township to complete the Mecosta County picture to date.

Four wildcats, one in each of four townships, were in various stages of development in Montcalm County including one driving pipe in Crystal, one rigging in Montcalm Township, one fishing in Pierson Township just above the Michigan Stray gas sand level and one shut down in Richland Township.

Saginaw County

Dundee was topped at 2,850 feet and drilling suspended at 2,912 feet in Fred Turner and others' No. 1 Sunrise Cooperative Farm Community, SE SW SE Section 6, Albee Township, Saginaw County, drilled in before the holidays and now plugged and abandoned as a dry hole. Two other Saginaw tests are uncompleted, one shut down in Chapin Township and another in Tittabawassee Township.

Other Wildcats

Talbot Oil Co.'s No. 1 McPherson estate, NE NE NW Section 35-3n-4e, Howell Township, Livingston County, which struck a show of 213,000 feet of gas daily in the Sylvania formation two weeks ago at about 3,850 feet, was drilling at about 4,150 feet on the way to the Trenton at about 4,400 feet.

Operators were planning to resume drilling in H. Shell and others' No. 1 William F. Zeeb, NW SE Section 34, Genoa Township, another Livingston County test, this week.

Drilling operations also were expected to be resumed this week in several Lapeer County tests in southeastern Michigan where four Oregon Township wells were shut down and one rigged in Mayfield Township.

R. Bier, trustee's No. 1 Albert Stepanski and wife, NE SE SW Section 14, Kawkawlin Township, Bay County, was drilling in the Dundee as a central eastern Michigan test.

Two tests were shut down in Rush Township, Shiawassee County, and one as yet uncompleted in Vernon Township of the same county. One test was drilling in Lyon Township, Roscommon County at about 1,000 feet, while a rig had been erected on the McClanahan Oil Co.'s new location in Adams Township, Arenac County, adjacent to Gladwin County, where M. F. Whitehill recently brought in his discovery No. 1 Omer Kintner well in the Dundee pay sands in Beaverton Township, Gladwin County. It was reported Mr. Whitehill has erected rig for his No. 2 Kintner in Section 11-17n-2w, Beaverton Township.

New location for another Gladwin County wildcat was placed under permit by the Sun Oil Co. in Tobacco Township.

St. Clair County still reports one location in Grant Township with a new test rigging in Alcona Township, Alcona County.

Western Michigan Wildcats

Fischer-Robbins' No. 1 fee, formerly the Chamberlain estate, was shut down at 1,088 feet after a show of gas in the lower Traverse. It is located NE SW Section 14-24n-16w, Arcadia Township, Manistee County, western Michigan, about 100 miles north of Muskegon.

Mrs. Lillian Mahnke recently resumed drilling of her No. 1 fee, NE SW NW Section 2-6s-11w, St. Joseph County, in southwestern Michigan, which had been shut down for several years at 1,265 feet after drilling through the Traverse and Dundee formations without success. It will be carried to the Monroe or about 1,400 feet deep.

In Kent County F. Irwin Bryan and Harry T. Martin were having trouble with drive pipe at 263 feet in their No. 1 A. G. Aldrich, NE SW SW Section 3-8n-11w, Plainfield Township.

Bear Creek Oil & Gas Development Co.'s No. 1 John Fors, NE NE SE Section 29-3n-14w, Heath Township, Allegan County, was drilling at about 300 feet, while the Dragoon Development Co.'s No. 1 W. K. Young, SW NW NW Section 15-17-n15w, Logan Township, Mason County, about 60 miles north of Muskegon, was drilling at about 800 feet.

Reed Oil Co. has moved in and is rigging up for an eastern extension test on the J. J. Fisher lease, SE SW Section 10-1n-16w, Muskegon Township, Muskegon County, located about a quarter of a mile beyond present production in the old Muskegon Field.

New Locations

Thirteen new permits to drill were issued by the oil and gas division of the Michigan Conservation Department, a majority of them for wildcat tests.

Two are for tests being started by W. Hunter Atha in Mount Haley Township, where his No. 1 Moran made about 300 bbls. after acid treatment on a loca-

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Turner Valley Well Flows 18,000,000 Feet, Making 150 Barrels Naphtha

By VICTOR LAURISTON
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, Jan. 5.—Official figures of the federal department of trade and commerce at Ottawa show that the output of crude petroleum from all Canadian fields in October totaled 122,056 bbls., compared with 114,242 bbls. in September and 107,054 bbls. in October, 1933. For the 10 months of 1934 the output was 1,188,469 bbls., an increase of 26.4 per cent over the total of 940,494 bbls. in the same period of 1933.

Alberta production was up in October, totaling 107,231 against 102,038 bbls. in September. Ontario production also increased from 11,097 to 13,947 bbls., while New Brunswick production dropped from 1,107 to 878 bbls. For the 10 months of 1934, all three provinces show gains over the corresponding 1933 period.

Kent County Gasser

In the De Clute Field, Kent County, Ontario, Gas Producers Syndicate's No. 2, Gilbert Pardo lease, Raleigh Township, 2½ miles west of Cedar Springs, has finished at about 1,542 feet with a natural production of around 5,500,000 to 6,000,000 feet a day. It will not be shot. The first small pay, about 5,000 feet a day, was met at 1,149 feet, with about 98,000 feet additional at 1,420 feet. Location is about 1,050 feet south of Gas Producers' No. 1 on the same lease, which finished below 1,579 feet with about 1,500,000 feet a day after a shot. The tests were financed by Detroit interests, with F. H. Stover & Son of Chatham handling the drilling contracts.

In the Tilbury Field, R. L. Pattinson's No. 1 Jones farm, N half Lot 169, Talbot Road, Tilbury East Township, is down 1,400 feet with some gas production and is waiting for a shot.

In the Dover Field, Kent County, Prairie Oil & Gas Co.'s No. 2, Stephens farm, Lot 2, Front Concession, Dover East Township, is deepening from 3,140 feet. At this depth it was 300 feet in the Trenton lime without a show. In the same field, Medina Natural Gas Co.'s No. 1, Stirling lease, E half Lot 1, Concession 4, Dover East Township, is below 1,200 feet.

In the Eden Field, on the Norfolk-Elgin County line, Midwal Oil & Gas Co.'s No. 1, Lot 2, Concession 3, North Talbot Road, Middleton Township, is below 400 feet. Farther east, Middleton-Norfolk Gas Co.'s No. 1, Lot 5, same concession, is shut down around 1,100 feet. In the same field, E. P. Rowe and associates of Toronto have located No. 3 on the Charles Coyle farm, Bayham Township, and No. 2 on the Wilson farm, Lot 27, Concession 8, Bayham Township. No. 2 Coyle finished some weeks ago with about 90,000 feet a day and No. 1 Wilson was good for around 360,000 feet a day.

The Walters Syndicate of Buffalo is drilling a new test for gas in the east end of Norfolk County, between Simcoe and Jarvis. Dave Wright, who recently finished a dry hole in the Eden Field for Charles Simpson and associates of Simcoe, had moved his outfit to a location east of Jarvis, for a new test.

Turner Valley Field

In the South Turner Valley Field, Director Royalties' No. 1, LSD 16, Section 28-18-2w5, is still blowing rotary fluid with the gas encountered in the Madison limestone at 5,660 feet. The wet gas flow is estimated between 18,000,000 and 20,000,000 feet a day and crude naphtha recovery on the separator is expected to run between 150 and 200 bbls. daily. In the same section, Carleton Royalties' No. 1, LSD 2, is making around 100 bbls. a day of naphtha, with the flow from the lower porous horizon cut off by freezing. Hot oil will probably be circulated to thaw out the ice bridge. Farther east, Spooner Oils' No. 5 Anaconda, LSD 1, same section, is drilling below 6,100 feet in a hard grayish-black lime. It has a small gas flow and is nearly 600 feet in the Madison.

To the west, Renfrew Royalties' No. 1, Morris & Goodfellow, LSD 3, Section 28-18-2w5, is below 4,410 feet with two fair shows of light crude from the Dakota sands. British Dominion Oil & Development Corp.'s No. 4, LSD 6, same section, is at 4,350 feet, working on casing. Pacalta Oils' No. 1, LSD 7, has sidetracked lost tools and is making new hole more than 200 feet in the lime, with a fair gas flow.

In the far south end of the field, Union-Freehold Oil Corp.'s No. 1, LSD 8, Section 21-18-2w5, is below 4,610 feet.

On the east side of the structure, Livingston Syndicate's No. 1, LSD 5, Section 34-18-2w5, is below 3,210 feet. Merland Oil Co.'s No. 2, LSD 13, Section 27-18-2w5, is shut down at 2,300 feet.

Alberta Operations

Owing to severe cold weather, a number of outfits in the Turner Valley Field and in outlying Alberta areas are temporarily shut down. In the Border areas, Franco Oils' No. 1, LSD 6, Section 53-25w4, on the Cardston structure, is the only test actually drilling. It is below 1,000 feet and nearing the first potential gas sand. Franco's No. 2 has been located east and north of No. 1.

In the Forest Reserve area west of Olds, Hunter Valley Oil Co.'s No. 1 McLaren, LSD 12, Section 13-31-10w5, is below 4,810 feet.

On the Highwood-Sinclair structure south of Turner Valley, Canadian Royalties' No. 1 Banner, LSD 6, Section 34-17-3w5, is below 680 feet.

New Valley Test

McLeod Oil Co. of Calgary is negotiating with the New Valley Oil Co. with a view to taking over and completing New Valley's No. 1 in LSD 4, Section 6-21-2w5. The test, started in 1926, was shut down at 2,200 feet owing to lack of funds. Location is 2½ miles east of Millarville, and north and east of the North Turner Valley Field, apparently on a fold paralleling the Turner Valley structure to the east. McLeod Oil Co. recently sold its deep lime rights in the Central Turner Valley Field to the Royalite Oil Co.

Hudson Bay Junction

In the Hudson Bay Junction area, in northern Saskatchewan, Trail Blazer Oil & Gas Co.'s No. 1, SW Section 32-44-3w2, will run casing to 610 feet to shut off sand forced into the hole with asphaltic crude encountered at 590 feet. The test has been waiting for casing, which could not be moved in till the muskeg trails froze hard. The test got nothing but water in the Dakota sand, and got the top of the Devonian lime at 510 feet. A sticky asphaltic grease was met at 585 feet and on deepening to 610 feet a mixture of oil and sand rose 100 feet in the hole. After casing is run it will be deepened into the sand, and given a production test. Lighter crude is looked for in the lower part of the sand.

Saskatchewan Drilling

In southern Saskatchewan, Amalgamated Oils, Ltd., has arranged to complete Blackfoot Oil & Gas Co.'s No. 1, about 40 miles south of Regina. It has been standing at around 1,750 feet, and will resume early in the spring. Amalgamated Oils, Ltd., has another test located on the crest of the Pilot Mound structure, where it will likely spud next March.

In the Lloydminster gas field, West-Central Saskatchewan, Lloydminster Development Co.'s No. 1 is starting on the R. O. Gibbs farm, northeast of Lloydminster and about a half mile east of Lloydminster Gas Co.'s No. 1 gasser.

Four miles east of Simpson, Simpson Oil Co.'s No. 2 is drilling in the upper horizons.

Scott, Trego and Russell Counties, Kansas, Are High Spots of New Year; Big Wells in Reno

By JAMES McINTYRE

Definite proof of two new pools in Kansas, one in far western Scott County, and the other in Trego, also a western county, together with the development of the Haury-Burrton Pool and intense wildcat campaign in Russell County are the high lights of the opening days of the new year in Kansas.

Russell County, which has 10 pools already proven with 215 producing wells, promises to be the busiest oil field in the State this year, especially among the wildcatters. A late well in that county is Empire Oil & Refining Co.'s No. 1 Ehrlich, NE NE SE Section 28-13-14w, reported to be good for 1,500 bbls. a day from Siliceous lime at 3,274-78 feet.

The Scott County discovery, Atlantic Oil Producing Co.'s No. 1 Vaniman, C SE NE Section 15-20-22w, produced 572 bbls. in 24 hours from Chat at 4,670-86 feet, which had been acidized. Mississippi lime was topped at 4,640 feet. The Trego discovery was reported last week as having pumped a potential of 828 bbls. It is Alma Petroleum Co.'s test in Section 11-11-23w.

Marathon Oil Co. added a well to the Haury-Burrton Pool, No. 1, in C NE NE NW Section 23-23-4w, which flowed 2,394 bbls. in 24 hours from Hunton lime at 3,591-98 feet. It was later acidized.

Sinclair Prairie Oil Co. has a good new well in Rice County, No. 3 Volkland, SE SE SE Section 20-19-9w, in Siliceous lime at 3,188-97 feet. It swabbed 687 bbls. in 12 hours without lowering the fluid level below 700 feet off bottom. The crew was running tubing for a pumping test.

The largest producer of the week in the State was completed by the Derby Oil Co. in the Burrton Pool. It made 4,909 bbls. in 24 hours. A review of the week's work follows:

Estimated Production

Estimated daily average production of Kansas for the week ended January 5 and for the preceding week follows:

	Barrels	
	Jan. 5	Dec. 29
Hollow	6,750	6,975
Ritz-Canton	11,700	11,725
Voshell	4,925	5,775
Johnson	2,140	2,000
Nikkell	6,225	6,600
Sedgwick County	8,575	8,700
Ellsworth County	2,925	4,115
Barton County	2,120	1,350
Rice County	17,200	17,040
Reno County	14,510	13,310
Ellis County	410	440
Kingman County	1,090	1,250
Stafford County	1,210	1,900
Russell County	8,225	11,525
Greenwood County	11,500	11,400
Butler County	18,600	19,000
Other pools	19,435	19,115
Total Kansas	137,550	142,750

Butler County

T. C. Johnson completed No. 2 Stearn, SE NE SE Section 28-27-6, Butler County, a 28-bbl. well, in Viola lime at 3,075-79 feet.

Cowley and Elk Counties

In Cowley County, Murphy and others' No. 1 Caldwell, NW NE NE Section 7-35-3, had 1,700 feet of oil in the hole. It had not been tested. There was a showing of oil and gas at 3,100-10 feet. Sand topped at 3,440 feet showed oil at 3,457 feet and at 3,495 feet. It was bottomed at 3,504 feet.

Wakefield and others' No. 1 Carson, NE SW SW Section 8-32-3, was a hole full of water from Siliceous lime at 3,555-66 feet and was abandoned.

Trees and others have a rig up for No. 1 Tittsworth, C NW NE Section 30-30-4.

In Elk County, Sagamore Oil & Gas Co. completed a 6-bbl. well in No. 1 Plummer, NW NE SE Section 28-31-12, in pay at 1,248-57 feet.

Sedgwick County

Dickey Oil Co.'s No. 1 C. Cook, NE NE NW Section 20-28-1e, Sedgwick County, was acidized at 3,104-16 feet but produced only water and was abandoned.

Dickey Oil Co.'s No. 1 Riley, SE NE SW Section 20-28-1e, was completed. It had produced 589 bbls. initially from Chat at 3,097-3,124 feet.

Sovereign Oil Co. completed No. 2 Scherger, 260 feet from south and 180 feet from west lines of NW Section 6-26-1e. It made a potential of 124 bbls. from pay at 2,560-96 feet after an acid treatment.

Cornett & Evans' No. 1-A Boling, CEL NE NW SW Section 6-26-1e, was abandoned at 2,560 feet after a long fishing job, and No. 2 Boling, 1,250 feet from west and 230 feet from north lines of SW Section 6, was drilling at 325 feet.

Syndicate Oil & Gas Co. had a hole full of water in No. 1 Katzlaff, NE NW NW Section 30-26-2, from Viola lime at 3,373-80 feet, and was shut down.

Reno County

In the Haury-Burrton Pool, in Reno County, Derby Oil Co.'s No. 2 Ackley, C NW NW SE Section 14-23-4w, had Hunton lime at 3,594-99 feet and flowed 4,909 bbls. in 24 hours, with the tools stuck in the hole.

Barnsdall Oil Co.'s No. 4 Sabin, NW SW SE Section 11-23-4w, was acidized at 3,561-73 feet, Hunton lime, and pumped 50 bbls. per hour. No. 5 on the lease, SW SW SE Section 11, filled up 2,500 feet of oil in seven hours from pay at 3,602½ feet, drilled in 1 foot.

Same company has cellar dug for No. 7 Sabin-C, SE SW SE Section 11, and for No. 8 Sabin-C, SW SE SE Section 11.

Olson Oil Co. and Shell Petroleum Corp.'s No. 2 Sabin-B, C SW SW Section 13-23-4w, old total depth 3,622 feet, had casing ripped at 3,290-3,320 feet and it made a 4,800,000-foot gas well. Same companies made a location for No. 1 Hayner, SE SE NW Section 14-23-4w.

Olson Oil Co., Shell Petroleum Corp., and Continental Oil Co. made a location for No. 5 Blake, 860 feet from south and 990 feet from east lines of SW Section 23-23-4w.

The Olson-Shell partnership made locations for No. 2 Johnson, C NW NW Section 24-23-4w, and for No. 4 Goering-A, 600 feet from south and 575 feet from east lines of SW Section 26-23-4w, and for No. 4 Krehbeil, NW NE NW Section 26-23-4w.

Barnsdall Oil Co. and Indian Territory Illuminating Oil Co.'s No. 3 Baughman was completed. It pumped 2,226 bbls. in 24 hours from Hunton lime at 3,584-89 feet. Cellar is dug for No. 4 Baughman, SW SE NE Section 34.

Olson Oil Co. and Shell Petroleum Corp. completed No. 1 England, C SW SE Section 34-23-4w, which had started off at 630 bbls. per day from Chat at 3,253-3,370 feet.

Harvey County

Shell Petroleum Corp. made a location for No. 2 Neufeldt, 1,321 feet south and 1,325 feet east of NW cor. Section 8-22-3w, Harvey County.

The Imo Oil & Gas Co.'s wildcat, No. 1 Sperling, SE NE NE Section 23-22-2w, was drilling at 3,309 feet. It had the base of the Mississippi lime at 3,270 feet; Misener sand at 3,278 feet; Hunton at 3,279 feet; 400 feet of oil in the hole at 3,281 feet, some water at 3,291-95 feet; 2,000 feet of oil in the hole at 3,295-96 feet. It swabbed 92 bbls. in 2½ hours, lowering the fluid level to 250 feet off bottom, but it filled to 1,200 feet off bottom in 12 hours. Then drilling was continued. The oil is 35 gravity.

McPherson County

Continental Oil Co. and others' No. 1 Wanger, NW NW NE Section 32-21-1w, McPherson County, pumped 5 bbls. per hour from Hunton lime at 3,306-25 feet.

Dickey Oil Co.'s No. 1 Tull, NE NE SW Section 13-19-3w, gauged 28,000,000 feet of gas in 24 hours from Chat at 2,957-3,006½ feet.

Shell Petroleum Corp.'s No. 8 Griffin, 1,314 feet north and 330 feet west of C Section 14-19-2w, was completed. It pumped 301 bbls. of oil and 145 bbls. of water in 24 hours from Viola lime at 3,365-75 feet, acidized.

C. W. Lamar and others' No. 1 Rolander, SE NW NW Section 8-18-2w, was dry and abandoned at 3,408 feet. It was a wildcat test. Mississippi lime was topped at 3,235 feet.

Tom Palmer completed No. 1 Gustafson, NE NE NW Section 30-18-2w. It pumped 114 bbls. in 24 hours from Kansas City lime at 2,277-2,321 feet, acidized.

Bob Youker and others' No. 2 Rolander, NE NW SW Section 30-18-2w, is an 85-bbl. completion, producing from Kansas City lime at 2,350-2,405 feet. It had been acidized.

Marion County

Ogden Brothers spudded No. 1 Chinberg, C NE SE NW Section 18-19-2, Marion County.

Rice County

Garden and others completed No. 1 Whinery, SE cor. Section 3-21-7w, in Chat at 3,359-83 feet. It pumped 726 bbls. in 24 hours in a potential test.

Sinclair Prairie Oil Co. was moving in material for No. 6 Thompson, NE SE NW Section 21-20-10w, in the Raymond Pool.

Empire Oil & Refining Co. made a location for No. 2 Meyers, C SW SW SW Section 21-19-9w, Beyer Pool.

Phillips Petroleum Co.'s No. 2 Link, NW NW SW Section 21-19-9w, pumped 75 bbls. in 3½ hours and was pumped off. It was acidized in Siliceous lime at 3,212-35 feet.

Empire Oil & Refining Co.'s No. 1 Grove, SW SW NE Section 29-19-9w, had Siliceous lime at 3,224-27 feet, total depth, and it pumped 786 bbls. of oil in 16 hours.

Shell Petroleum Corp.'s No. 1 Tournear, NW NW SE Section 29-19-9w, pumped 1,081 bbls. in 22 hours from Siliceous lime at 3,204-10 feet.

The Texas Co. has rig up for No. 4 Grove, SW NE NE Section 29-19-9w.

Ellsworth County

Bradley & Scanlon and others have cellar dug for No. 1 Mohney, C NE SE SE Section 14-17-9w, Ellsworth County. Carter Oil Co. has location made for a wildcat test, No. 1 Teubner, 440 feet north and west of C Section 26-17-9w.

Russell County

Sinclair Prairie Oil Co. completed No. 1 Sellens, NW cor. Section 36-15-13w, which made 292 bbls. in 24 hours from Oswald lime pay at 3,083-86 feet, acidized.

Bridgeport Machine Co.'s No. 14 Mermis, SE SE SW Section 33-13-15w, was acidized at 3,050-3,100 feet, and pumped 143 bbls. initially. It was completed.

Tom Palmer's No. 1-A William, a twin, NW cor. Section 27-13-14w, produced 1,579 bbls. in a potential test from Siliceous lime at 3,302-15 feet.

Tom Palmer's No. 1 Herbel, NW NW SW Section 4-12-11w, a wildcat, was dry and abandoned at 3,826 feet.

Sinclair Prairie Oil Co. had cellar dug for No. 3 Brumgardt, C SE SW NW Section 31-12-15w. Same company had

(Continued on Page 78)

Wildcat Operations in Kansas

Week Ended January 5

(Descriptions are East unless marked otherwise)

BARBER COUNTY

Sam Jarvis et al's No. 1 Morrisse, C SE NE Sec. 23-30-10w.
Rig.

Southern Drlg. Co. et al's No. 1 Davis, 330 ft. from W and 330 ft. from S lines of NE Sec 13-34-15w.
Rig.

BARTON COUNTY

D. L. Hall et al's No. 1 Arnold, SE SE SW Sec. 19-18-15w.
Rig.

Murphin and Downing's No. 1 Lanterman, NW SE Sec. 15-19-11w.
Siliceous lime 3,332 ft.; T.D. 3,355 ft.; pumped 78 bbls. in 5 hrs.

C. L. Price et al's No. 1 Ehrlich, NW SE Sec. 10-16-13w.
T.D. 360 ft.; fishing.

Treleaven & Brimm et al's No. 1 Haas, SW cor. Sec. 30-18-15w.
6-in. 3,325 ft.; fishing.

BUTLER COUNTY

Gaines et al's No. 1-A McKinley, NE NE SE Sec. 19-29-4.
Acidized K.C. lime 1,890-1,950 ft.; flowed 25 bbls. oil, 25 bbls. wtr.; acidized.

Seibel, Great Basin Oil Co. et al's No. 1-A McKinley, NE SE Sec. 19-29-4.
K.C. lime 1,888-1,915 ft.; will acidize.

CLAY COUNTY

Seidel Bros.' No. 1 Younken, C S½ SE NW Sec. 21-9-4.
8-in. 1,275 ft.; drlg. 1,400 ft.

Severs et al's No. 1 Meyers, NE NW NW Sec. 4-10-4.
Mississippi lime 1,775 ft.; T.D. 1,834 ft.

COWLEY COUNTY

Ben Gralapp's No. 1 Kukuk, SW SW NW Sec. 6-33-4.
6-in. at 2,725 ft.; shat 3,297 ft.; drlg. 3,304 ft.

Otstot et al's No. 1 Eckhardt, SE NW Sec. 15-35-6.
Spudded and S.D.

DICKINSON COUNTY

Dutch Oil Co.'s No. 1 Phillips, C NE NW Sec. 15-15-1e.
Drlg. 2,511 ft.

ELK COUNTY

Lassen's No. 1 Ferguson, SE SE SW Sec. 21-30-8.
1,760,000 ft. of gas 2,056-5 8ft.; 5-in. csg. 2,160 ft.; sand 2,169-72 ft.; hole full oil.

GREENWOOD COUNTY

Kite et al's No. 1 Jamison, SW SE NE Sec. 30-26-13.
S.D. 525 ft.

HARVEY COUNTY

O. J. Connell et al's No. 1 Roth, SW cor. Sec. 16-22-2w.
Spudded and S.D.

Imo O. & G. Co. et al's No. 1 Sperling, SE NE NE Sec. 23-22-2.
1,200 ft. oil in hole; drlg. 3,309 ft.

Wenzel et al's No. 1 Schrag, NW SE Sec. 24-22-3w.
T.D. 587 ft.; S.D. for csg.

KINGMAN COUNTY

Magnolia Pet. Co.'s No. 1 Bartholomew, SE SE SW Sec. 30-27-4w.
Drlg. 2,307 ft.

McPHERSON COUNTY

Lario O. & G. Co.'s No. 1 Base, SW cor. Sec. 22-20-2w.
Drlg. 2,641 ft.

C. W. Lamer et al's No. 1 Rolander, NE NE NW Sec. 8-18-2w.
Dry and abd. 3,408 ft.

Even a heavy rainstorm wouldn't bother these G-E CONTROLLERS

They're Weatherproof!

FOR your well-pumping rigs driven by squirrel-cage motors, use one of these G-E controllers. You can install them outdoors. You don't even have to build a protective shed over them—they're *weatherproof.*

Important, too, is the fact that you can buy from General Electric the *right* control for every type of motor installation. For example, look into the control described and illustrated below.

No. 1 is a combination magnetic switch—a motor-starting switch and a disconnect switch, housed in a single, weatherproof, cast-iron cabinet. Just one unit to install, instead of two. Consider the saving! Saves space, too. Weatherproof, corrosion-resisting, oil-immersed combination switches are also available.

No. 2 is the well-known CR7006 magnetic motor-starting switch, housed in a strong, weatherproof, cast iron case. Particularly recommended for single-rated motors up to 50 hp. Also available in oil-immersed types for outdoor service.

No. 3 is a special control for double- or triple-rated motors. This unit and a G-E Y-delta motor are well suited for both present and future pumping needs—the low ratings for present allowables and the high rating for the future.

No. 1. Combination magnetic switch

No. 2. CR7006 motor-starting switch

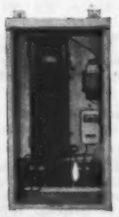
No. 4 is an ingenious motor starter with time-switch control, for intermittent operation of wells to meet the requirements of proration.

•

For complete information on these and many other G-E controllers for oil-field service, see a G-E oil-field specialist near you. Remember, General Electric also makes a complete line of motors for every pumping and drilling requirement. General Electric, Schenectady, New York.

Specify G-E insulated cable, which is available in every type, size, and voltage, for dependability in bringing power to your job.

No. 3. Y-delta motor control



No. 4. Motor starter with time-switch control (cover removed)

080-17

GENERAL ELECTRIC

Central West Fields

(Continued from Page 53)

opment Co.'s No. 14 on the John Warrick farm, Section 32, Goshen Township, is a gas well at 1,288 feet.

In Guernsey County, Four Leaf Clover Co.'s No. 1 on the R. S. Grimes farm, Section 15, Monroe Township, is a gas well at 1,185 feet. In Willis Township, J. T. Roach drilled in No. 6 on the Jennie E. Rose farm, which produced 3 bbls. initial.

In Athens County, Gross & Freebault's No. 6 on the B. Irwin farm, Section 19, Athens Township, Athens County, was dry. D. T. Orndoff is drilling on the Lewis Morris farm, Lot 1, Ames Township.

W. A. Crowley's No. 2 on the William and Catherine farm, Section 16, Brush Creek Township, Muskingum County, is dry at 1,330 feet.

George Jewell and others' No. 1 Floyd S. McKee farm, Section 1, Willis Township, Guernsey County, is a gas well at a depth of 1,319 feet. George Jewell's No. 1 John S. Calvert farm, Section 1, same township, is a gas well at 1,317 feet. Ferguson & McCullough's No. 3 Herbert Watson farm, Lot 2, same township, was a gas well at 1,334 feet. Wilber Keith and others' No. 1 John A. Montgomery farm, Lot 21, Millwood Township, was dry.

Meigs County

In Meigs County, Ohio Fuel Gas Co.'s No. 1 Maud Buffington farm, Section 6, Rutland Township, is a gas well at 1,045 feet. B. G. Davis & Co.'s No. 2 Effie M. Haley farm, Section 8, same township, is a gas well.

In Harrison County, the Pittsburg Co. abandoned its location on the L. M. Fisher farm, Section 4, Freeport Township.

In Perry County, Ohio Fuel Gas Co.'s No. 2 Blanche Shough farm, Section 8, Reading Township, is a gas well in the Clinton lime at 3,080 feet, with around 500,000 feet. Wiser Oil Co. is drilling on the Franklin King farm, Section 35, Thorn Township. Hopewell Oil & Fuel Co. is drilling below 2,700 feet in No. 5 Michael Emmert farm, Section 9, Reading Township. Marshall Bauman and others are drilling on the A. J. Mautz farm, Section 9, same township. Kachelmacher Oil Co.'s No. 8 on the Hemlock Coal Co.'s land, Section 25, Coal Township, is shut down for lack of water at close to 2,000 feet.

In Wayne County, Ohio Fuel Gas Co.'s No. 1 on the W. F. Berry farm, Section 12, Congress Township, was dry at a depth of 2,855 feet.

In Fairfield County, City Natural Gas Works' No. 1 on the William Frisner farm, Section 6, Pleasants Township, is a gas well.

In Athens County Gross & Freebault's No. 6 B. Irwin farm, Section 19, Athens Township, is dry at 1,228 feet, and Thomas Clark is drilling No. 2 on the Roy D. Radford farm, Section 25, same township. In Lodi Township, Ohio Fuel Gas Co. is starting on the L. A. Ruth farm, and A. D. Townsend is drilling on the John H. Hartley farm, Section 17, same township.

In Tuscarawas County Status Development Co. is drilling on the R. E. and H. J. Stone farm, Section 4, Fairfield Township, and its No. 2 on the Fairfield Brick Co.'s property, same section, was dry at 892 feet.

George Jewell is drilling on the Mary Cunningham farm, Section 28, Millwood Township, Guernsey County. In Richland Township, Jewell & Hammond are drilling No. 1 on the Frank L. Thompson farm, Section 13. In Westland Township, C. C. Wharton is drilling No. 3 on the H. H. and Mary Turner farm, Section 10. William Larrick & Co. is drilling No. 1 on the Nora V. DeColier farm, Section 19, Wheeling Township.

Kenova Oil & Gas Co. is drilling No. 1 on the Frank C. Halstead farm, Lot 101, Shalers Township, Portage County.

In Meigs County, Summers Oil & Gas Co.'s No. 2 William D. Roush, Section 36, Sutton Township, is a gas well in the Berea grit at a total depth of 1,795 feet.

In Vinton County, Haslett & Walters' No. 2 Henry Cecil farm, Section 2, Harrison Township, made 1 bbl. of oil at 454 feet. Co-operative Oil Co.'s No. 7, Knox Township, same county, produced 3 bbls. initial at 1,015 feet.

INDIANA

In Gibson County, Big Four Oil & Gas Co.'s No. 1 on the O. H. Redburn farm, SE NW, Donation 107, was dry at 1,754 feet. In Center Township, Murphy Oil Co. abandoned No. 2 E. Whiting farm, Section 31. In Patoka Township, William D. Flynn abandoned Nos. 4 and 5 on the H. J. Wigg farm, Section 11. In Sullivan County, Dome Gas Co.'s No. 2 W. H. Jennings farm, NE NE Section 19, Curry Township, is a gas well at 267 feet.

In Pike County, Ohio & Bemont abandoned No. 5 on the J. R. Chew farm, Section 32, Washington Township, and abandoned Nos. 5, 10, 12 and 13 on the L. C. Thomas farm, same section. A. E. Daviess is drilling No. 2 on the Frank Armand farm, Section 20, same township. In Madison Township, Bruner & Abbott are drilling No. 13 D. M. Shawhan farm, Section 25, and H. C. Darby is drilling No. 1 on the Sam Deering farm, Section 29, Lockhardt Township.

In Knox County, Mead Oil Co.'s No. 1 on the Effie Taylor farm, NW Section 14, was a nice gas well at 593 feet, and its No. 1 on the L. S. Lloyd farm, NW Section 14, and in Busseron Township, produced 10 bbls. initial at 826 feet. O. A. Thayer and others' No. 1 on the N. A. Hall farm, in the NE Section 15, same township, is a gas well.

KENTUCKY

Four completions were reported from Kentucky, three being dry and one an oil well. In Ohio County, Inland Oil & Gas Co.'s No. 1 A. S. Crowley farm, in the Friendship Pool, produced 8 bbls. initial. W. E. Hupp and others found a dry hole in No. 2 on the Templeton farm. Earnest Porter's No. 2 Edwards heirs farm, was dry at 450 feet, and S. J. Sirmans' No. 2 on the Sidney Neel farm was dry at 650 feet.

ILLINOIS

Three completions were reported from the Illinois Field, all in Clark County. In Casey Township, Hartman and others' No. 1 on the J. F. Lougham farm was dry. In Parker Township, Leon Stewart and others' No. 8 Fred Knecht farm, Section 32, produced 2 bbls. initial at 432 feet, and Edward R. Phillips' No. 10 Sarah Phillips farm, Section 7, same township, had an initial of 2 bbls. In Crawford County, G. R. Pauly is drilling No. 1 on the Guy Comley farm, Section 12, Oblong Township.

In Lawrence County, Ohio Oil Co. abandoned six wells in Bridgeport Township: No. 1 C. M. Piper, Lot 8; No. 1 W. B. Johnson, Lot 8; Nos. 1 and 2 A. B. Abernathy, Lot 8, and pulled out Nos. 1 and 3 on the W. B. Gray, in Lot 3. In Dennis Township, Ohio Oil Co. abandoned No. 1 W. D. Dennison farm, Section 3, and Hamilton Producing Co. abandoned No. 1 on the Guy Vandermark farm, Section 2 and 3, same township.

In Marion County, Southwestern Oil & Gas Co. abandoned Nos. 4 and 17 on the A. E. Benoist farm, Section 8, Sandoval Township, and Nos. 3, 5 and 7 on the B. C. Warfield farm, same section.

In St. Clair County, Ohio Oil Co. is reported drilling No. 27 on the Matilda Dyroff farm, Section 27, Sugar Loaf Township.

In Monroe County, Maystown Oil Co. is drilling on the Louis Faust farm, Section 32, Mitchie Township.

TENNESSEE

In Fayette County, Tennessee, Hay-Fay Oil & Gas Co. is drilling No. 1 on the Morrison farm, a mile north of Lacona. Mid-Continent Development Co. is drilling No. 1 on the Smith farm, 2 miles south of Dancyville, and Mike J. Kissick is drilling No. 1 Claxton farm, 7 miles south of Stanton.

Higher Allowable Will Be Asked for Heavy Oil in California Field to Meet Fuel Oil Demand

By L. P. STOCKMAN
Staff Correspondent, California Fields

LOS ANGELES, Calif., Jan. 7.—The Central Committee of California Oil Producers, official curtailment committee, has decided to recommend to the petroleum administrator that a change be made in the formula now used in the allocation of production, as its members are of the opinion that the method of determining the oil demand does not reflect a true picture. The decision to make this recommendation is the result of a survey which indicated a need of grading the demand between light and heavy crude oil. It has been obvious for several months that producers of heavy unrefinable crude oil were entitled to a larger allowable because of the increasing demand for fuel oil.

For several years California marketers have been endeavoring to reduce stocks to what has been considered an economic level on the basis that elimination of excessive stocks would prevent dumping at distress prices and thus stabilize conditions but now, parodoxical as it may seem, some are insistent that they be permitted to increase certain grades of stocks. Shipments of fuel oil to the Atlantic seaboard for domestic consumption made quite a dent in California stocks and, while no commitments for the intercoastal trade have been made for 1935, local marketers feel that the export market will register a substantial increase and thus offset some of the loss anticipated in the domestic business. Several California marketers are reluctant to further reduce fuel oil stocks as they are below that mythical economic level. Revision of the demand formula so that the Central Committee may allocate a higher allotment to heavy oil producers when the demand for this grade of oil justifies it will eliminate some of the inequities. Severe restriction in production imposed on California last year, which permitted substantial reductions in fuel oil stocks, has been an important factor in the improved conditions on the West Coast. It is now time to revise the State's allowable and at the same time differentiate between light and heavy crude oil.

Mountain View

The Mountain View Field of Kern County came back to lift this week by yielding two completions both of which registered satisfactory commercial production. The Mohawk Oil Co. finished No. 3 Clendennen flowing 891 bbls. of clean 27.3 gravity oil per day from 5,759 feet after the hole had been completed with a 4¾-inch liner carrying 311 feet of perforated. This new well also yielded 1,012,000 feet of gas per day. The Hancock Oil Co. closed the week by completing its second excellent producer on the Miller property. It was brought in under a natural flow doing 3,876 bbls. of clean 27.4 gravity oil per day. Two possible abandonments in the west end of the field tend to offset these completions, as the Union Oil Co. is expected to abandon Nos. 3 and 4 due to the failure to develop commercial production. These abandonments may not be as important as might appear on the surface as this field is rather treacherous because of the monoclinal structure. Production is developed from an accumulation along a fault extending from northwest to southeast. The nearer a well is to the fault the larger the production, although there may be exceptions to this rule. Some question still exists as to whether this field is one continuous productive area or whether there are three distinct productive areas.

In the Edison Field, located a few miles east of Mountain View, several wells are making hole in the pay and consequently Edison may have another new well or two before the expiration of another fortnight. This district, based on development up to the present time, will only be of secondary importance both from a production standpoint and as far as productive acreage is concerned. It is one of the few fields undergoing development where dry holes are listed with great regularity. This week the Shell abandoned No. 1 Cauley as a dry hole at 4,276 feet and another well may be abandoned within a short time. Several potential producers are nearing completion in this field, however, and consequently operators may make up for lost time. Due to the fact that the Edison Field has been both hot and cold, operators are proceeding cautiously with drilling operations.

Santa Barbara Mesa

Operators in the Santa Barbara Mesa Field chalked up five new wells during the past week and there are several additional potential producers nearing completion. Among the next group of producers should be Jacques Vinmont's No. 1 Low and E. C. Arnold's No. 1 Booker. Jacques Vinmont was a prominent executive in the California Petroleum Co. acquired several years ago by the Texas Co. and subsequently held considerable stock interest in the Pacific Western Oil Co. This experienced operator has been marking time during the past two or three years, although he has kept in touch with developments in the meantime, as he recognized that operators were not making any headway with exploration work. His judgment will be vindicated when he completes his first new well in the Santa Barbara Mesa Field some time during the next week or 10 days.

The new wells finished in the Santa Barbara Mesa this week include the Bastanchury Oil Co.'s No. 2 Mesa, Fred Cole's well No. 6, Crude Oil Co.'s No. 1 Mesa, Moss & Walker's No. 2 Securities and the Rio Grande's No. 3 Perkins. The largest well finished during the week was the Rio Grande's No. 3 Perkins which was finished flowing 779 bbls. of very clean 18.1 gravity oil per day from 2,005 feet after the hole had been finished with 1,778 feet of 2½-inch tubing. This new well was brought in barefoot as the hole is open from 1,965 feet to bottom, 2,005 feet. Moss & Walker's No. 2 Securities failed to result in a natural flow and it was found necessary to put it on a compressor upon completion at 2,022 feet. It showed an initial daily production of 589 bbls. of clean 18.9 gravity oil per day. The Crude Oil Co.'s well No. 1 was only a relatively small producer as it only showed an initial daily production of 194 bbls. of 18.1 gravity oil per day from 2,040 feet. Fred Cole's No. 6 Mesa was another small producer as it only showed an initial of 296 bbls. of very clean 18.2 gravity oil per day from 1,968 feet. The Bastanchury Oil Co.'s well No. 2, bottomed at 2,106 feet and finished with 2,061 feet of 2½-inch tubing was brought in flowing 441 bbls. of very clean 19.2 gravity oil per day. Operators in this field have found by experience during the past few weeks that new wells will show a much higher initial daily production if they are finished barefoot and consequently most operators have adopted the practice of landing a water string and then landing the necessary amount of tubing. This practice has proven especially adaptable as the formations encountered hold up very well and for the time being will not require either a liner or an oil string.

San Miguelito

The Continental Oil Co., which has encountered practically every known handicap in the drilling of No. 3 Grubb in the San Miguelito Field of Ventura County, decided a week or so ago to make a production test from the lowest effective depth. This well was drilled to 7,010 feet, but the company ran into so much trouble that the well was put on a production test after the hole had been plugged back to 6,377 feet. The initial daily production was somewhat of a disappointment although after several months of mechanical delay the 334 bbls. of 24.3 gravity oil per day was welcome. The first two completions of the Continental Oil Co. in this field were good for approximately 1,000 bbls. per day on a natural flow and consequently the initial of well No. 3 should not be taken as indicative of a normal completion in this field.

The Shell Oil Co. added two new wells in the Ventura Avenue Field of Ventura County. No. 35 Gosnell was brought in flowing 477 bbls. of 27.1 gravity oil, cutting 20 per cent, along with 371,000 feet of natural gas per day from 8,767 feet. This well was plugged back to 8,698 feet just previous to completion and consequently the bottom 67 feet of hole is dead as far as production is concerned. In addition to the oil produced, No. 35 Gosnell is producing 371,000 feet of natural gas per day. The Shell's No. 83 Taylor was also a rather unfavorable completion as it showed a cut of approximately 23.4 per cent. This new well, finished at 5,180 feet, with a 4¼-inch liner carrying 209 feet of perforated landed on bottom, was finished flowing 148 bbls. of 23.6 gravity oil per day.

Kettleman Hills

The Standard Oil Co. finished one new well and recompleted another in the Kettleman North Dome Field during the current week. The new well was No. 58-17-Q which was bottomed at 7,807 feet and brought in flowing 638 bbls. of 53.8 gravity oil per day. This new well was completed with a 6⅝-inch liner carrying 488 feet of perforated and is producing 17,500,000 feet of natural gas along with the oil. The Standard's No. 87-19-J, the recompletion listed this week, was given a preliminary production test early in December but water subsequently broke in and the company was obliged to undertake additional work. Upon being recompleted this well was returned to production flowing 1,672 bbls. of 38.7 gravity oil and 3,155,000 feet of natural gas per day. It was bottomed at 8,900 feet.

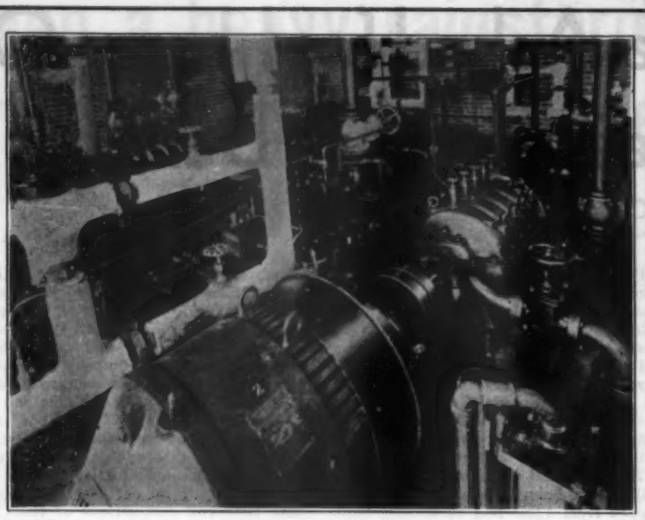
The Shell Oil Co., in the Mount Poso Field of Kern County, completed No. 14 Vedder, pumping 281 bbls. of clean 16.4 gravity oil per day from 1,743 feet. This new well was finished with an 8⅝-inch water string landed and cemented at 1,682 feet and 1,546 feet of 2½-inch tubing. The company's No. 4 Glide and No. 6 Vedder-Rall are standing cemented on top of the pay. The Union Oil Co. spudded in No. 17 S. & M. and it should be tanking oil within the next fortnight. The Union has four additional rigs erected upon this propertly but tentative plans call for the drilling of these projects one at a time. In the Midway-Sunset Field of Kern County, the Honolulu Oil Co. finished its well No. 53-8-D, but this new producer, located in Section 8-32-24, failed to show any oil. It was good for 990,000 feet of natural gas per day upon completion at 2,082 feet after the hole had been plugged back from 2,235 feet. The company's No. 22, in Section 14-32-24 looks rather good at

TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS

	Dec. 23		Dec. 16			
Intercoastal-domestic.	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Crude oil	.....	.....	.....	.....	.....	80,650
Fuel oil	.....	.....	.....	.....	11,805,207	4,758,707
Diesel and gas oil	.....	.....	.....	.....	1,507,410	1,472,581
Gasoline	223,323	31,903	14,383	2,055	7,996,040	10,554,829
Kerosene	53,679	7,668	148,532	21,219	1,377,850	1,216,090
Asphalt	.....	.....	.....	.....	70,019	12,179
Other finished oil	.....	.....	.....	.....	54,778	105,853
Other unfinished oil	.....	.....	.....	.....	.....	72,584
Foreign exports:						
Crude oil	.....	.....	176,541	25,220	8,025,465	7,468,060
Fuel oil	568,729	81,247	187,825	26,832	13,518,164	7,706,012
Diesel and gas oil	165,717	23,245	55,900	7,986	4,202,214	2,618,503
Gasoline	128,887	18,412	.....	.....	4,752,490	5,366,018
Kerosene	.....	.....	3,365	481	1,746,611	1,865,305
Other finished oil	.....	.....	.....	.....	37,955	12,086
Other unfinished oil	91,223	13,032	3,528	504	326,496	66,375
Coastwise-domestic:						
Crude oil	.....	.....	112,368	16,195	7,616,845	6,170,879
Fuel oil	172,384	24,626	82,511	11,787	9,388,921	10,521,762
Diesel and gas oil	2,293	328	54,261	7,752	771,569	981,033
Gasoline	194,848	27,835	128,280	18,326	13,593,687	12,266,535
Kerosene	2,959	423	.....	.....	306,236	197,371
Naphtha distillates	.....	.....	.....	.....	.....	27,851

TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS

Intercoastal-domestic:						
Fuel oil	.....	.....	.....	.....	110,650	.....
Diesel and gas oil	.....	.....	.....	.....	676,775	915,276
Gasoline	.....	.....	.....	.....	436,943	804,548
Kerosene	.....	.....	.....	.....	276,593	530,136
Lubricants	.....	.....	.....	.....	52,113	41,339
Foreign exports:						
Crude oil	103,257	14,751	.....	.....	1,960,618	1,775,431
Fuel oil	62,967	8,995	26,382	3,769	2,213,941	1,873,671
Diesel and gas oil	2,333	333	.....	.....	1,177,314	1,046,668
Gasoline	79,947	11,421	.....	.....	2,812,759	3,983,151
Kerosene	375	54	.....	.....	1,045,144	1,066,367
Lubricants	.....	.....	.....	.....	170,760	146,734
Other finished oil	.....	.....	.....	.....	2,760	7,909
Other unfinished oil	.....	.....	.....	.....	5,760	26,378
Coastwise-domestic:						
Fuel oil	.....	.....	113,108	16,158	5,232,385	3,956,351
Diesel and gas oil	.....	.....	.....	.....	119,036	249,663
Gasoline	89,395	12,485	126,262	18,323	5,440,926	4,493,292
Kerosene	.....	.....	.....	.....	82,434	114,138



Interior view of a pump room in a refinery erected by us.

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Subsidiary of Mt. Vernon Car Mfg. Co.
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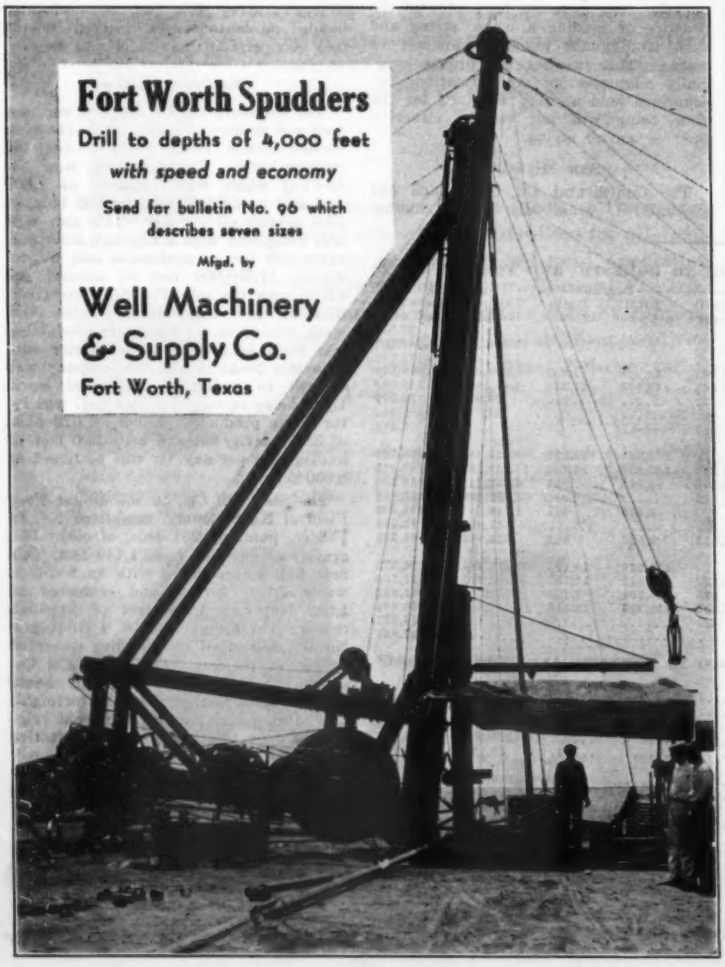


3,000 feet as it has developed a tendency to blow gas on the least provocation.

West Coyote

The Standard Oil Co. is grading for two new wells in the West Coyote Field of Los Angeles Basin and both of them are expected to be spudded in within the next 10 days. Drilling operations in Los Angeles Basin fields have shown a slight decline during the past two months but this may be due to the fact that operators are centering their operations in fields of the San Joaquin Valley. In the Inglewood Field, the Standard Oil Co. is preparing to complete No. 105 Baldwin and has staked location for well No. 29 on Vicker lease No. 1. Operators in the Dominguez Field of Los Angeles Basin seem to have slowed up a little during the past few weeks, but will quite likely increase the amount of drilling early in the new year.

The Montebello Field of Los Angeles Basin seems to have passed out of the picture due to failure of operators to locate the prospective deep zone but there are still a few holes under way. The Universal Consolidated Oil Co. has not yet given up hope of locating this deep zone and is accordingly drilling a deep test east of previous work. This hole may bear watching because of the fact that wells drilled to the west of the discovery well have failed to conform with expectations. This deep drilling in the Montebello Field has proved to be one of the most perplexing problems confronting operators as the deep zone which showed up so favorably in the discovery well has not yet been found by any subsequent hole. This has led operators to believe that the deep zone may perhaps extend to the east instead of to the west as production contours of the upper zone might indicate.

Playa Del Rey

There was very little change in the status of development work in the eastern end of the Playa Del Rey Field of Los Angeles Basin due to the failure of the Los Angeles city council to establish a zone permitting drilling operations. The council does not seem to be in any hurry to lift restrictions in this area due possibly to the fact that there are still 12 lots outside the community lease. If these lots, not included in the original community lease, can be brought into

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
General Pet. Co., No. 12 Capitan, Santa Barbara Co.	32- 5-30	1,859	sd. sh. drlg.
Shell Oil Co., No. 2 Capitan, Santa Barbara Co.	32- 5-30	3,199	cleaning out
Shell Oil Co., No. 3 Capitan, Santa Barbara Co.	5- 4-30	2,849	sd. sh. drlg.
Royalty Serv. Corp., No. 1 Los Alamos, Santa Barbara Co.	35- 9-32	4,500	suspended
Union Oil Co., No. 3 Santa Maria, Santa Barbara Co.	35-10-34	3,372	rig pump
York-Smullin, No. 2 Lompoc, Santa Barbara Co.	33- 8-34	420	sd. sh. drlg.
Barnsdall-Rio Grande, No. 10-88 Elwood, S. Barbara Co.	tideland	....	rigging up
East Elwood Pet. Co., No. 1 Elwood, Santa Barbara Co.	14- 4-29	3,708	reaming
Shell Oil Co., No. 1 Goleta, Santa Barbara Co.	20- 4-28	5,894	rd. sd. drlg.
Standard Oil Co., No. 2 Goleta, Santa Barbara Co.	17- 4-28	4,850	P.B. 1,195
Ortega Oil Co., No. 1 Summerland, Santa Barbara Co.	16- 4-25	4,582	P.B. 4,146
Woodrow Pet., No. 1 Rincon, Ventura Co.	4- 3-24	7,612	suspended
General Pet. Co., No. 4 Rincon, Ventura Co.	tideland	....	bldg. pier
Continental, No. 3 San Miguelito, Ventura Co.	33- 3-24	6,377	330 b.d.
Las Posas Pet., No. 1 Las Posas, Ventura Co.	22- 3-20	7,370	fishing
Fisher, Daniel, No. 1 South Mountain, Ventura Co.	5- 3-19	765	suspended
Texas Co., No. 128 South Mountain, Ventura Co.	4- 3-19	5,430	fish D.P.
Oil Ridge Oil Co., No. 1 Filimore, Ventura Co.	1- 4-19	1,500	br. sh. drlg.
Bolsa Chica Oil Co., No. 1 Piru, Ventura Co.	4- 4-18	461	fishing
Dawson Oil Co., No. 1 Simi, Ventura Co.	5- 2-17	1,876	reaming
Rancho Oil, Inc., No. 1 Ojai, Ventura Co.	18- 4-23	2,525	suspended
Continental Oil Co., No. 1 Ojai, Ventura Co.	12- 4-23	1,400	rd. sh. drlg.
Prop.Service Corp., No. 1 Lloyd, Ventura Co.	24- 3-23	7,194	rebldg. rig
Mosher, J. W., No. 1 Santa Paula, Ventura Co.	22- 4-21	2,300	will test
Standard Oil Co., No. 1 Lost Hills, Kern Co.	2-26-20	....	foundation
Casa Mira Oil Co., No. 1 Belridge, Kern Co.	29-28-20	6,504	dry—abd.
General Pet., No. 1 South Belridge, Kern Co.	30-28-21	11,377	suspended
Ohio Oil Co., No. 1 North Belridge, Kern Co.	36-27-20	8,525	cleaning out
Union Oil Co., No. 18 North Belridge, Kern Co.	36-27-20	8,522	fishing D.P.
Standard Oil Co., No. 1-A North Belridge, Kern Co.	36-27-20	6,040	sd. sh. drlg.
Standard Oil Co., No. 2 North Belridge, Kern Co.	36-27-20	5,671	rigging up
Amerada Pet., No. 1 Blackwells Corner, Kern Co.	17-26-19	4,250	P.B. 2,685
Cimarron Oil Co., No. 1 Delano, Kern Co.	14-25-27	2,198	dry—abd.
Standard Oil Co., No. 1 Delano, Kern Co.	1-25-23	....	material
Trico Oil & Gas Co., No. 1 Aipaugh, Kern Co.	3-25-23	2,525	gas—shut in
Trico Oil & Gas Co., No. 2 Aipaugh, Kern Co.	36-24-22	....	rigging up
Buckeye Union Oil Co., No. 1 McVan, Kern Co.	11-27-27	1,169	cleaning out
Hancock Oil Co., No. 2 Mountain View, Kern Co.	14-30-28	5,365	flow 2,000 bd.
Associated Oil Co., No. 1 Mountain View, Kern Co.	3-31-29	5,200	sd. sh. drlg.
Star Pet. Corp., No. 1 Mountain View, Kern Co.	10-30-28	2,908	sd. sh. drlg.
Union Oil Co., No. 4 Mountain View, Kern Co.	15-30-28	5,525	to abd.
Union Oil Co., No. 5 Mountain View, Kern Co.	15-30-28	5,474	suspended
Union Oil Co., No. 6 Mountain View, Kern Co.	9-30-28	2,291	sd. sh. drlg.
General Petroleum, No. 3 Mountain View, Kern Co.	14-30-28	....	bldg. rig.
Texas Co., No. 4 Mountain View, Kern Co.	14-30-28	2,769	cleaning out
Barnsdall, No. 3 Mountain View, Kern Co.	31-30-29	6,640	sd. sh. drlg.
Hogan Pet., No. 6 Mountain View, Kern Co.	4-31-29	4,700	sd. sh. drlg.
Standard Oil Co., No. 4 Mountain View, Kern Co.	23-30-28	5,425	cmtd. 5,406
Ohio Oil Co., No. 1 Mountain View, Kern Co.	33-30-29	3,020	sd. sh. drlg.
National Oil Co., No. 1 Mountain View, Kern Co.	30-30-29	5,604	redrlg. 5,240
Mountain View Oil Co., No. 1 Mountain View, Kern Co.	25-30-28	3,180	sd. sh. drlg.
Gilmore-Snyder Oil Co., No. 2 Mountain View, Kern Co.	24-30-28	4,761	sd. sh. drlg.
Gilco, Inc., No. 2 Edison, Kern Co.	23-30-30	2,259	.B. 1,915
Jergins Trust, No. 4 Edison, Kern Co.	24-30-29	1,802	sd. sh. drlg.
Consd. Crude Oil Co., No. 1 Edison, Kern Co.	17-30-29	3,675	sd. sh. drlg.
Ohio Oil Co., No. 1 Edison, Kern Co.	36-30-29	911	sd. sh. drlg.
Shell Oil Co., No. 1 Edison, Kern Co.	16-30-29	4,276	dry—abd.
Shell Oil Co., No. 2 Edison, Kern Co.	15-30-29	3,743	O.S. drlg.
Shell Oil Co., No. 3 Edison, Kern Co.	14-30-29	3,130	sd. sh. drlg.
Monterey Expl. Co., No. 5 Edison, Kern Co.	15-30-29	3,576	cmtd.
Texas Co., No. 1 Edison, Kern Co.	4-30-29	3,695	gr. sd. drlg.
Foster, Inc., No. 1 Edison, Kern Co.	8-30-29	500	cmtd.
General Pet., No. 2 Edison, Kern Co.	15-30-29	2,928	O.S. drlg.
Surety Oil Co., No. 1 Edison, Kern Co.	32-29-29	....	suspended
Petroleum Drilling Co., No. 1 Edison, Kern Co.	22-29-29	....	rigging up
Signal Oil & Gas Co., No. 1 Edison, Kern Co.	31-29-30	1,049	sd. sh. drlg.
Caravel Pet., No. 1 Sivert, Kern Co.	19-30-30	1,925	cleaning out
Sea Cliff Oil Co., No. 1 Greenfield, Kern Co.	7-31-28	581	sd. sh. drlg.
Tejon Ridge Oil Co., No. 1 Comanche, Kern Co.	23-32-29	1,582	suspended
Standard Oil Co., No. 1 Semi-Tropic, Kern Co.	8-27-23	....	rigging up
101 Oil Co., No. 1 Elk Hills, Kern Co.	5-30-24	....	rigged up
Richfield Oil Co., No. 2 Devil's Den, Kern Co.	14-25-18	630	sd. sh. drlg.
Texas Co., No. 1 Temblor, Kern Co.	29-29-21	2,330	br. sh. drlg.
Shell Oil Co., No. 1 Buena Vista, Kern Co.	9-32-25	1,471	sd. sh. drlg.
Reserve Oil & Gas Co., No. 1 Tejon, Kern Co.	2-10-19	....	rigging up
Badger Oil Co., No. 1 Tejon, Kern Co.	31-11-19	6,248	suspended
Russ Oil Synd., No. 1 Dos Palos, Fresno Co.	28-12-11	4,514	suspended
Bergman, Harry, No. 1 Dos Palos, Fresno Co.	12-13-11	6,135	suspended
Union Oil Co., No. 1 Lillis-Kettleman, Fresno Co.	24-21-16	10,944	fish d.c.&b.
K.N.D.A., No. 56 Kettleman, Kings Co.	8-22-18	10,154	redrlg.
Texas Co., No. 1 Coalinga, Fresno Co.	35-20-14	1,220	sd. sh. drlg.
Farrel Pet., Well No. 1, San Luis Obispo Co.	18-31-12	1,432	hd. sh. drlg.
Willett Oil Co., No. 1 Cholame, San Luis Obispo Co.	10-25-15	3,605	sd. sh. drlg.
Commonwealth Consd. Gas, No. 1 Tulare Lake, Kings Co.	21-22-20	2,490	gas—shut in
Commonwealth Consd. Gas, No. 3 Tulare Lake, Kings Co.	21-22-20	....	suspended
Kettleman Pac. Oil Co., No. 1 Tulare Lake, Kings Co.	11-23-16	812	sd. sh. drlg.
General Pet., No. 1 Devil's Den, Kings Co.	20-24-18	....	suspended
Buttes Oilfields Co., No. 2 Marysville, Sutter Co.	35-16-1	6,774	hd. sh. drlg.
Amerada Pet., No. 1 F.L.D., San Joaquin Co.	15- 2-5	....	material
Milham Exploration Co., No. 3 Tracy, San Joaquin Co.	24- 2-4	4,002	dry—abd.
Pure Oil Co., No. 1 Chowchilla, Madera Co.	7-10-14	8,220	fishing
Northern Counties Pet., No. 1 Tehama, Tehama Co.	25-24-3	2,420	hd. sh. drlg.
Texas Co., No. 1 Petrolia, Humboldt Co.	1- 3-2	1,117	reaming

line, the city council would in all probabilities lift the restrictions so as to permit development work at an early date. The position taken by the city council is eminently fair because if these lots are left out of the community lease they will require 24 offsets and as a consequence operators will have another town lot drilling caimpaign on their hands. Property holders and other interested parties do not want another repetition of what has taken place in the older section of the field and if the city dads maintain their attitude they will merit commendation of all taxpayers.

The present condition of properties in the older section of the Playa Del Rey Field justifies the initiation of immediate remedial measures as the deplorable conditions resulting from haphazard work should not be tolerated. Unfortunately, many of the original operators have passed out of the picture and for this reason the city council has been rather lenient. Operators in the older section of the field are not only violating existing fire ordinances but have created an especially obnoxious situation. This has naturally mitigated against the consummation of legitimate leases with the result that stringent regulations are now being imposed on reputable operators. Playa Del Rey presents one of the worst examples of town lot development and merits the severest condemnation. Operators holding potentially productive acreage or town lots in the eastern end of the Playa Del Rey Field are bringing all the pressure to bear that they can, but it begins to look like they will have to produce if they expect to meet projected regulations. There is absolutely no reason to tolerate town lot drilling in the eastern end of the Playa Del Rey Field as this new area is up on the high ground and can be developed in a normal manner provided that lessors co-operate. The city council has indicated that it will not lift existing restrictions until operators get together and this mandatory edict has met with general approval. There is a little acreage just west of the town lot area which is subject to development and operators are not losing any time in taking advantage of this situation. The Union Oil Co.'s Vidor lease runs up to the base of the Palisades and there is about one or possibly two locations between this property and the town lot area. This intervening property is being subleased so that by the end of another month there will be about four legitimate wells making hole beyond the limits of the Vidor lease. The next two completions in the eastern end of the Playa Del Rey Field should be the Union's No. 6 Vidor and the Big Ben Oil Co.'s well No. 1 as both are within a few hundred feet of completion.

BUYS STORAGE TANKS

W. C. Berry of Sonken-Galamba Corp., Kansas City, Kans., announces the purchase of 150 storage tanks, located in Oklahoma and Texas. These tanks range in sizes from 35,000 to 55,000 bbls. Mr. Berry is one of the largest dealers in steel storage, having cut down and re-erected over 200 tanks during the past two years.

Pennsylvania Grade Crude Advanced 15c.

Increased demand for Pennsylvania Grade crude oil, which has resulted in the eastern pipe lines running a higher percentage of the potential than they had been doing in December and November, caused a general price advance of 15 cents per barrel, posted on January 4.

A 25-cent cut was made in November and another 25-cent reduction was posted on December 6, bringing the prices of Pennsylvania grade oil down to a figure where no money could be made. The new prices will not satisfy the producers, but the increase is considered a good sign, and operators in the New York, Pennsylvania, West Virginia and southeastern Ohio fields are confident that they will soon be back to the scale that prevailed early in November, which was 35 cents higher than the present price schedule.

The National Transit Co., Tide Water Oil Co. and other buyers in the Bradford and Allegany Field advanced the Allegany and Bradford prices to $2.20 per barrel. The Pennzoil Co.'s new schedule calls for graduated prices from $2.12 to $2.06, depending on the length of the pipe line haul. The South Penn Oil Co.'s other prices, effective December 4, were as follows: In Southwest Penn lines, $1.87; in Eureka Pipe Line lines, $1.82; in Buckeye Pipe Line lines, $1.72.

Texas Allowables Cut for Month of January

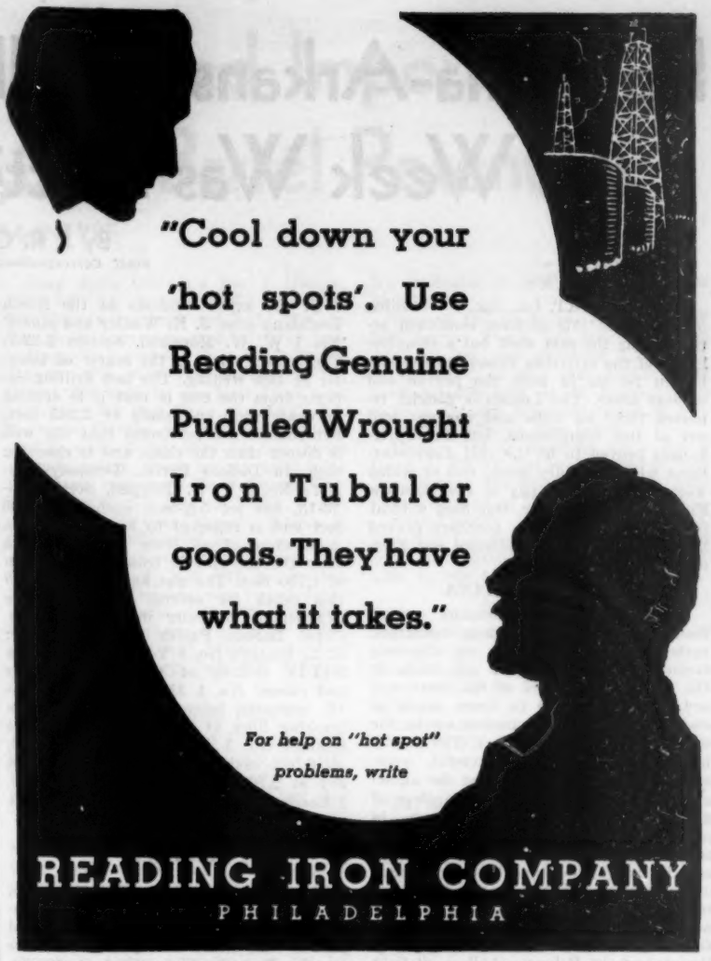
AUSTIN, Tex., Jan. 7. — The Texas Railroad Commission has cut 2,445 bbls. from the state proration total to reduce the allowable to 998,612 bbls., a margin of 7,388 bbls. under the federal recommendation of 1,006,800 bbls. daily for January.

The commission reduced allowables for four fields, increased two and did not change three. Changes were effective January 1.

New allowables by districts: Gulf Coast, 178,653 bbls., increase of 867 bbls.; Southwest Texas, 36,605 bbls., decrease of 517 bbls.; West Texas, 147,407 bbls., decrease of 695 bbls.; East Central Texas, 52,002 bbls., decrease of 100 bbls.; West Central Texas, 25,000 bbls., decrease of 6,000 bbls.; East Texas, estimated at 423,000 bbls., increase of 4,000 bbls., although proration basis unchanged; Panhandle, 58,800 bbls., unchanged; North Texas, 58,500 bbls., unchanged, and Government Wells, 18,645 bbls., unchanged.

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Speik, F. A., No. 1 Athens, Los Angeles Co.	2- 3-14	1,298	sd. sh. drlg.
Houser, G. W., No. 1 Athens, Los Angeles Co.	18- 3-14	4,037	suspended
Macrate, A. N., No. 1 Athens, Los Angeles Co.	18- 3-14	5,950	sd. sh. drlg.
Hillside Oil Co., No. 1 Hermosa, Los Angeles Co.	31- 3-14	....	grade
Wilshire Oil Co., No. 2 Potrero Deep, Los Angeles Co.	27- 2-14	7,995	recmtd. 6,875
Madison Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	....	rigged up
Mammoth Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	....	bldg. rig
Fouri, C. W., No. 2 Del Rey, Los Angeles Co.	27- 2-15	....	suspended
Pacific Drlg. Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	....	foundation
Union Oil Co., No. 6 Del Rey, Los Angeles Co.	27- 2-15	5,745	sd. sh. drlg.
Union Oil Co., No. 7 Del Rey, Los Angeles Co.	27- 2-15	....	rigging up
Big Ben Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	4,808	sd. sh. drlg.
Bethlehem Expl. Co., No. 1 Manhattan, Los Angeles Co.	36- 3-14	5,304	resume work
Staple Oil Co., No. 1 Manhattan, Los Angeles Co.	24- 3-15	6,321	sd. sh. drlg.
Marble, Willard, No. 1 Chatsworth, Los Angeles Co.	6- 2-16	1,985	suspended
Partridge & Chambers, No. 1 Whittier, Los Angeles Co.	22- 2-11	....	location
Standard Oil Co., No. 1 Montebello Deep, Los Angeles Co.	6- 2-11	3,450	pump 50 b.d.
Universal Consd., No. 4 Montebello Deep, Los Angeles Co.	6- 2-11	3,449	sd. sh. drlg.
Shively, N. O., No. 1 Puente Hills, Los Angeles Co.	23- 2-10	2,641	sd. sh. drlg.
Pressel & Tull, No. 1 Puente Hills, Los Angeles Co.	30- 2-9	4,140	hd. sd. drlg.
International Dev. Co., No. 1 Saugus, Los Angeles Co.	34- 5-16	3,962	hd. sh. drlg.
Barstow Oil Co., No. 1 Castaic, Los Angeles Co.	35- 5-16	3,265	hd. sd. drlg.
Black Eagle Oil Co., No. 1 Huntington, Orange Co.	tideland	4,702	cmtd. 4,243
Explorers Drilling Co., No. 1 Fairview, Orange Co.	9- 6-10	945	recmtd.
Nuoil Co., No. 1 Newport, Orange Co.	29- 6-10	6,485	run liner
B & B Oil Co., No. 1 Newport, Orange Co.	19- 6-10	3,320	sd. sh. drlg.
Shannon, C. G., No. 1 Yorba, Orange Co.	21- 3-9	5,777	rig cable tools
Great American Pet. Co., No. 2 East Coyote, Orange Co.	19- 3-9	3,156	cmtd. 3,152
Bartholomae Oil Co., No. 2 East Coyote, Orange Co.	22- 3-10	....	suspended
Great American Pet. Co., No. 1 Chino, San Bernardino Co.	18- 2-8	2,462	suspended
Great American Pet. Co., No. 3 Chino, San Bernardino Co.	7- 2-8	313	suspended
Tehama Pet., No. 1 Santa Ana Canyon, S. Bernardino Co.	23- 2-8	2,698	P.B. 2,381
San Diego Pet. Co., No. 1 Chula Vista, San Diego Co.	32-18-2	6,232	reaming
Edmonds, E. A., No. 1 Trustee, San Diego Co.	29-15-3	2,431	hd. sd. drlg.
Great Coastal Oil Co., No. 1 Elsinore, Riverside Co.	36- 5-5	596	hd. sd. drlg.



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CAST IRON RIVER-CROSSING PIPE

1,000 ft. of 10", Class 250, Mono-Cast Doublex Simplex River Crossing Pipe being laid across Arkansas River at Newkirk, Okla., by CWA labor, to operate at 130 lbs. working pressure. Inset shows close-up of joint. For literature on this pipe write American Cast Iron Pipe Co., Birmingham, Ala.

Louisiana-Arkansas Drilling Continues Active but the Week Was Practically Barren of Results

By J. R. CRUMPTON
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., Jan. 7.—Drilling operations in this division continued active during the past week but a recapitulation of the activities showed practically barren results in both the proven and wildcat areas. The Louisiana district reported three oil wells and one gas well out of five completions, but South Arkansas proved to be the real disappointment with three dry holes, two of which were in the deeper pay of the Rainbow Field in Union County. One deep wildcat in the North Louisiana territory proved to be a failure and Mississippi and Florida contributed one each.

NORTH LOUISIANA

As stated in these columns several months ago, North Louisiana operators, rather than take chances on unproven territory, have re-entered old fields in the northwestern part of the state and are either deepening to lower sands or testing shallow sands passed up in the earlier stages of those areas. The results have been unusually successful, especially in view of the fact that the allowable is small on any well regardless of the potential flow. The producers in most cases have been small pumpers of from 50 to 150 bbls. and Caddo and Bossier Parish Fields have been the center of reworking activity. Among the fields in on this play are the old Caddo Field northeast of Mooringsport, the Pine Island and Trees City Fields of Caddo Parish and the Bellevue shallow oil field and the Sligo gas field in Bossier Parish. The Hosston area in Caddo Parish has also been extensively drilled during the past six months.

Three-quarters of a mile north and slightly west of a recent mile extension of the old Caddo Field, which opened a new producing horizon northeast of Mooringsport, V. & F. Oil Co.'s No. 1 Etchison, Section 16-20-15, is swabbing and flowing 200 bbls. daily from 2,195 feet. The Ark-La-Tex Oil & Gas Co., original discoverers of this producing area with a good pumper completed several months ago, brought in its second producer during the past week. The second well, No. 1 Le Rosen, Section 15-20-15, is swabbing 70 bbls. daily from a total depth of 2,216 feet. This area is decidedly the most active spot in tht North Louisiana district at this time with more than half a dozen rigs. In the Trees City Field, west of the above area, G. R. Stevens' No. 1 Hart, Section 22-21-16, was completed from the Nacatoch pumping 25 bbls. daily from 1,036 feet. The Blanchard Field, which produces gas from two horizons, completed the list of producers from North Louisiana with Louana Oil & Gas Co.'s No. 3 R. H. Cushman, Section 33-19-16, flowing 150,000 feet of gas from 928 feet. Thus Caddo Parish, the oldest producing area in North Louisiana furnished all of the producers from this district during the last seven-day period. An important wildcat in Natchitoches Parish, a few miles southeast of the town of Natchitoches, was the leading disappointment in the wildcat areas. Benedum & Trees' No. 1 Carver estate, Section 6-8-7, topped the lower cretaceous at 5,336 feet and the test was abandoned as dry at 5,339 feet. There is no report of any particular shows anywhere along the log in this wildcat but drilling reports show the top of Midway at 2,670 feet, top of marl at 3,270 feet, top of Arkadelphia 3,386 feet, top Annona chalk 3,525 feet with the gas at 3,880 feet. The base of Austin chalk is logged at 5,010 feet and the top of the red beds at 5,248 feet.

Of the active wildcats in the North Louisiana area, J. K. Wadley and others' No. 1 W. W. Moreland, Section 2-22-7, Claiborne Parish, is the center of interest at this writing. The last drilling reports from the test is that it is drilling in chalk rock and shale at 2,385 feet, but rumors are persistent that the well is deeper than the chalk and is checking high. In DeSoto Parish, Dempsey-Mansiel's No. 1 T. D. Thigpen, Section 33-13-13, has set 5⅞-inch casing at 1,690 feet and is reported to have obtained a good show of oil from the chalk rock after the use of acid from a total depth of 1,730 feet. The test has been down to this depth for several weeks but has experienced difficulty in setting casing. Other DeSoto Parish wildcats follow: E. L. Foster's No. 1 Youngblood, Section 9-11-14, drilling at 1,820 feet; Hester and others' No. 1 Alston, Section 11-11-16, cemented bottom of hole and sidetracking liner at 2,690 feet; George Le Grand's No. 1 Vance, Section 34-12-16, set 6-inch casing at 2,608 feet and tested dry at 2,707 feet; Ben F. Smith's No. 1 Bonds, Section 23-12-11, bailing to test at 2,742 feet.

ARKANSAS

The Rainbow Field in Union County, northeast of El Dorado, and which recently uncovered a deeper pay in an old proven field failed to report a producer for the first time in several weeks. On the other hand two such tests in the area were dry holes. Alice-Sidney Oil Co.'s No. 8 Gregory, Section 11-17-14, was abandoned as dry after testing salt water two weeks ago from 3,371-86 feet. The abandoned total depth of the well was 3,577 feet. Marine Oil Co.'s No. 1 Townsend, Section 10-17-14, had barren results on tests and was abandoned as dry at 3,470 feet. The third dry hole in Union County for the week was Tubal Petroleum Co.'s No. 1 Gaddy in Section 14-17-14. The log on this test records testing two joints of mud and 1,000,000 feet of gas in 30 minutes from 2,816-32 feet and a later test developed 11 fourbles of salt water from 3,050-95 feet. The test was dry and abandoned at a total depth of 3,416 feet.

Numerous wells in the Rainbow Field are either testing or about to reach the testing stage and indications are that several good flowing producers will result. Some of the tests in that area follow: J. E. Crosbie, Inc.'s No. 1 E. F. Gregory, Section 10-17-14, drilling plug at 3,347 feet after testing 1,800 feet of oil in the hole and the same operators' No. 1 W. E. Gregory, Section 15-17-14, coring at 3,365 feet; H. L. Hunt, Inc., has four wells either on the pay or nearing that horizon; No. 12 E. F. Gregory, Section 10-17-14, tested 200 feet of oil and mud from 3,290 to 3,333 feet; the same operators' No. 14 E. F. Gregory, Section 11-17-14, has set 7-inch casing at 3,288 feet with sand cored from 3,294-98 and 3,328-31 feet; Lion Oil Refining Co.'s No. 1-A Gregory, Section 11-17-14, has set 7-inch casing at 3,346 feet with 7 feet of sand cored to the total depth of 3,256 feet; two other wells of this company are nearing the pay sand; S. H. A. Oil Co., original discoverers of the deeper pay in this area, has one well, an offset to the discovery, waiting on standard rig to pump and two other tests that should reach the pay horizon during the next few days.

A wildcat in Arkansas County, Grand Prairie Realty Co.'s No. 1 Fischer, Section 6-6s-4w, reports 7 feet of sand showing oil from a corrected depth of 1,724 feet. Casing was set at 1,695 feet but while bailing to test fresh water broke in and the operators announce that if this cannot be shut off, the derrick will be skidded over and a new hole drilled. In Calhoun County, P. J. McMurray's No. 2 Calion Lumber Co., Section 33-15-14, has set 10-inch surface casing at 190 feet and is drilling at 2,125 feet. The Miller County Field, east of Texarkana, reports two wells on the sand, Magnolia Petroleum Co.'s No. 6 Olivet, Section 3-16-26, with 8½-inch casing set at 2,933 feet, 3 feet of sand with total depth of 2,838 feet. The Thorntree Oil Corp.'s No. 2 E. H. Beck, Section 34-15-26, is waiting on standard rig to pump with 3 feet of sand and 1,400 feet of oil in the hole at a total depth of 2,933 feet.

MISSISSIPPI

This district reported one dry hole, no new locations and very few active rigs. In Simpson County, Berry Corp.'s No. 2 R. T. Berry, Section 33-2n-4e, logged the top of the chalk at 2,588 feet and the test was dry and abandoned in that formation at 2,635 feet. An Issequena County test, Pelican Oil & Gasoline Co.'s No. 1 Martin and Bender, Section 11-12n-8w, has set 7-inch casing at 3,100 feet. Two wells in the Amory gas field, Monroe County, are active making hole. P. J. McAlpine's No. 1 Crook, Section 4-13s-18w, in the immediate proven area, topped the paleozoics at 490 feet and is drilling in hard lime at 1,350 feet. About 15 miles from the boundary of the limited gas field, the same operator's No. 1 Frank Rye, Section 15-15s-17w, is drilling at 2,910 feet. A wildcat in Winston County, Jack Vale and others' No. 1 Moody, Section 3-13n-14e, is drilling in sand at 785 feet.

Wildcat Operations in Louisiana-Arkansas

(Rotary operations unless otherwise designated)

NORTH LOUISIANA

AVOYELLES PARISH

Bell Oil Co.'s No. 1 Woodley, 330 ft. S and W NE cor. NW Sec. 11-2n-5e.
S.D. 1,700 ft.

BIENVILLE PARISH

M. V. Duncan et al's No. 1 Hutton, 400 ft. S, 330 ft. E, NW cor. Sec. 4-18-7.
S.D. 1,570 ft.

Saline Drlg. Co.'s No. 1 Pardee, Sec. 27-14-6.
S.D. 2,670 ft.; (corrected).

BOSSIER PARISH

Howard & Baird's No. 1 Gold, 150 ft. S and E, NW cor. Sec. 36-20-13.
S.D. for water 1,126 ft.

W. A. Kirkland's No. 1 Jarrett & McKeller, 330 ft. N and W, S cor. NW NW Sec. 3-21-13.
Set 10-in. 43 ft.

Leonard Co.'s No. 1 Pearson, 350 ft. S and E, of C Sec. 23-21-14.
S.D. for fuel 2,367 ft.

Scott & Howard's No. 1 Sherrill, Sec. 13-19-12.
Partly rigged up and S.D.

R. L. Skidmore et al's No. 1 Davis, Sec. 12-18-13.
S.D. 1,015 ft.

CADDO PARISH

Ark.-La. Tex. O. & G. Co.'s No. 1 LeRosen, 990 ft. E, 330 ft. N, SW cor. NW Sec. 15-20-15.
Comp.; swbng. 70 bbls., 2,216 ft.

W. T. Bell et al's No. 1 Bostick, 1,320 ft. E, 660 ft. N, SW cor. Sec. 12-23-16.
S.D. for water, 2,540 ft.

Burkett O. & G. Co.'s No. 1 Lindholm, 400 ft. S and E, NW cor. NE SE Sec. 16-17-14.
S.D. 1,046 ft., repairing rig.

A. D. King, tr.'s No. 1 Roach, 641 ft. E, 375 ft. N, SW cor. SE Sec. 4-14-16.
S.D. 2,128 ft.

M. Rodgers' No. 4 Muslow, 1,495 ft. S, 1,270 ft. W, C Sec. 4-20-15.
Set 4½-in. 2,140 ft.

G. R. Stevens' No. 1 Hart, 300 ft. N and E, SW cor. E½ SW Sec. 22-21-16.
Comp.; pumping 25 bbls., 1,036 ft.

Shreveport Oil Corp.'s No. 3-C Muslow, 1,106 ft. E, 280 ft. N, SW cor. NW Sec. 4-20-15.
Set 6-in. 2,040 ft.; T.D. 2,155 ft.

Shreveport Oil Corp.'s No. 4-C Muslow, 1,720 ft. E, 100 ft. N, SW cor. Sec. 4-20-15.
Set 10-in. 101 ft.

Leonard Co.'s No. 4 S. P. Harrell, 220 ft. N and W, SE cor. NW SW Sec. 3-21-14.
Set 5 3/16-in., 1,070 ft.

Tooke & Reynolds' No. 1 Levy, 330 ft. N and W, SE cor. NE Sec. 16-20-15.
Drlg. 1,802 ft.

Looke & Reynolds' No. 2 Levy, 300 ft. S and E, NW cor. SE NE Sec. 16-20-15.
Derrick pattern.

J. I. Roberts Drlg. Co.'s No. 1 Lane & Simon, 480 ft. E, 150 ft. S, NW cor. SW Sec. 15-20-15.
Drlg. 2,165 ft.

Press & Lambert's No. 1 Lane & Simon, 166 ft. S, 1,124 ft. E, NW cor. SW Sec. 15-20-15.
Drlg. 1,900 ft.

V. & F. Oil Co.'s No. 1 Etchison, 330 ft. N and E, SW cor. NE NE Sec. 16-20-15.
Comp.; flowing 200 bbls., 2,195 ft.

CATAHOULA PARISH

T. R. Hincy's No. 1 La. Central Lbr. Co., Sec. 32-9-6e.
S.D. for D.S. 1,541 ft.

CLAIBORNE PARISH

J. K. Wadley et al's No. 1 Moreland, 330 ft. N and E, SW cor. SE NE Sec. 2-22-7.
Drlg. 2,385 ft.

DESOTO PARISH

Bayou Pierre Oil Co.'s No. 1 B. Y. Wemple, C SE NE SW Sec. 14-12-11.
W.O.S.R. 2,731 ft.

Century O. & Drlg. Co.'s No. 1 Morton, 300 ft. N and E SW cor. SE NE Sec. 27-11-14.
S.D. 2,580 ft.

Dempsey & Mansiel's No. 1 Thigpen, 375 ft. S, 320 ft. W, NE cor. SW NE Sec. 33-13-13.
Set 5 3/16-in., 1,690 ft.; T.D. 1,730 ft.

DeSoto Pet. Co.'s No. 1 B. Y. Wemple, C S½ SE NE SW Sec. 14-12-11.
S.D. 2,073 ft.

E. L. Foster's No. 1 Youngblood, Sec. 9-11-14.
Drlg. 1,820 ft.

Hester et al's No. 1 Alston, 330 ft. S and W of center of Sec. 11-11-16.
Sidetracking liner 2,620 ft.

George Le Grande's No. 1 Vance 180 ft. N and W SE cor. SW Sec. 34-12-16.
Tested dry; W.O. 2,707 ft.

Ben F. Smith's No. 1 Bonds, 200 ft. E, 500 ft. N, SW cor. Sec. 23-12-11.
Testing 2,742 ft.

National Oils, Inc.'s No. 1 B. Y. Wemple, NW SW Sec. 14-12-11.
S.D. 120 ft.

LA SALLE PARISH

Frod Graham's No. 1 Urania, 300 ft. N, 150 ft. E, SW cor. SW NW Sec. 18-20-3e.
Set 10-in. 103 ft.

F. A. Trichelio's No. 1 Urania, Sec. 3-9-1e.
S.D. 1,491 ft.

NATCHITOCHES PARISH

Benedum & Trees' No. 1 Carrier Est., 300 ft. N and W, SE cor. Sec. 6-8-7.
Dry and abd. 5,339 ft.

(Continued on Page 76)

Crude Production

Estimated daily crude production for the week ended January 5 follows:

NORTH LOUISIANA

	Bbls.
Bellevue	550
Caddo light	5,000
Caddo heavy	1,790
Converse	1,305
Cotton Valley	445
DeSoto and Red River	1,470
Elm Grove	385
Haynesville	3,670
Holly	175
Homer	2,655
Pleasant Hill	190
Sarepta-Carterville	565
Urania	3,300
Zwolle	2,525
Total	24,025

SOUTH ARKANSAS

Champagnolle	4,700
El Dorado	2,300
Lisbon	250
Miller County	1,210
Nevada	940
Smackover light	2,290
Smackover heavy	18,925
Stephens	605
Urbana	2,275
Total	33,595

Edmond Pool Takes on Added Importance as New Well Shows 14,000-Barrel Potential

By JAMES McINTYRE

Oklahoma producers brought the output of their product down to a very low figure in the week ending Saturday, January 5. A total of 407,000 bbls. per day was all they allowed their wells to produce. The average production for the past year has been in the neighborhood of 494,000 bbls. per day with a high point of 556,540 bbls. (average for the week ending June 15), which emphasizes the deep cut that operators made in their crude output last week.

Among the features of the week's events in Oklahoma was the discovery of oil in a wildcat being drilled by Sinclair Prairie Oil Co. in Section 36-17-1w, 4 miles south of the Langston Pool in eastern Logan County. At this writing the well was bottomed at 5,225 feet with Simpson Dense at 5,225 feet. It flowed an undetermined quantity of oil for 12 minutes and when swabbed down to a 2,100-foot level, it filled up an additional 1,100 feet over night.

A half mile extension northwesterly in the Edmond area in Oklahoma County was also an important although by no means an unexpected event. The Mid-Continent Petroleum Corp. drilled the extension well which flowed 3,024 bbls. through a 4-inch choke in five hours' time, or at the rate of over 14,000 bbls. per day. Little doubt remains that the Edmond Pool will extend considerably beyond the Mid-Continent's well and the extension makes a number of properties on the west side look very valuable. The oil produced in the five completed wells in the field is of high gravity and they have at this time a potential production in excess of 30,000 bbls. per day.

Fitts continues to show big wells. The completions and near completions of the past two weeks indicate a potential production of such magnitude as would necessitate a lot of pipe line building if there were a demand for so much oil.

Jackson County, in southwestern Oklahoma, is in for a thorough exploration campaign and following the Gypsy Oil Co.'s oil discovery there, a number of new tests have already been "located" and these will all be drilling in a short time.

Estimated Production

Estimated production by pools in Oklahoma for the week ended January 5 and for the preceding week follows:

	Barrels	
	Jan. 5	Dec. 29
Allen	6,125	6,950
Asher-West	1,450	1,490
Burbank	9,100	9,100
South Burbank	9,500	9,550
Balance of Osage	27,500	27,500
Blackwell	4,750	4,750
Bristow-Slick	9,650	9,750
Crescent	5,525	5,525
Cromwell	4,500	4,500
Cushing-Shamrock	13,250	13,250
Chandler district	6,150	6,200
Duncan district	4,100	4,150
Fish	6,425	8,350
Fitts	2,000	2,600
Gray	850	1,850
Graham	3,400	3,425
Healdton	9,200	9,200
Hewitt	4,800	4,800
Holdenville	2,225	2,200
Keokuk	1,200	1,325
Konawa	1,600	1,925
Lucien	7,300	11,050
Marshall-Lovell	1,000	1,000
Oklahoma City	110,675	153,575
Papoose	1,250	1,350
Sasakwa and Townsite	2,150	2,100
Sholem-Alechem	4,100	4,100
Seminole Field:		
Bowlegs	8,500	9,825
Carr City	3,000	4,125
Earlsboro	7,125	8,550
East Earlsboro	6,875	8,350
South Earlsboro	950	725
Little River	8,850	10,400
East Little River	525	825
Maud	1,200	1,075
Mission	1,900	2,575
Seminole	7,350	8,450
East Seminole	1,000	1,025
Searight	2,550	2,800
Total Seminole	49,825	58,425
St. Louis-Pearson	17,100	20,250
Tatums	5,900	5,500
Tonkawa-Garber-Thomas	6,100	6,100
Wewoka	4,400	4,400
Yale-Jennings	4,800	4,750
Other pools	59,100	58,210
Total Oklahoma	407,000	469,100

Pontotoc County

In the Fitts Pool, Pontotoc County, H. L. Blackstock and others' No. 4 Hardin, SE SE NW Section 30-2-7, produced 640 bbls. the first hour and 1,650 bbls. in three hours, with the hole at a total depth of 4,382 feet, in McLish lime.

Magnolia Petroleum Co.'s No. 3 Tom Norris, NE NW SE Section 25-2-6, flowed 710 bbls. the first hour and 693 bbls. the second hour, sand record not ascertained.

Moore and others' No. 1-A Smith, NW NW NW Section 31-2-7, flowed 518 bbls. of oil through 3½-inch tubing, from pay at 3,730-4,234 feet.

Stanolind Oil & Gas Co.'s No. 1-A Hardin, NE NE SW Section 30-2-7, had sand from 3,730 to 4,234 feet and flowed 1,945 bbls. in five hours through tubing.

J. E. Crosbie's No. 1-A Dawes Hardin, SW SW NE Section 30-2-7, produced 1,898 bbls. of oil in four hours together with gas at the rate of 5,000,000 feet per day. Bromide was topped at 3,760 feet. Total depth 4,185 feet.

Deep Rock Oil Co.'s No. 1 Hardin, NW SE NE Section 30-2-7, produced 630 bbls. in one hour and 2,512 bbls. in four hours from sand at 3,741-4,241 feet.

Magnolia Petroleum Co.'s No. 1 Dawes Hardin, SW NW NE Section 30-2-7, flowed 230 bbls. in one hour from sand at 3,940-4,298 feet. Same company's No. 2 Dawes Hardin, SE NE NW Section 30-2-7, made 1,398 bbls. in five hours through casing. Sand lay at 3,956-4,345 feet. Same company's No. 3 Dawes Hardin, SE NW NE Section 30-2-7, flowed 458 bbls. in 20 hours through tubing. It had sand at 3,965-4,345 feet.

Moore and others had rig corners laid for No. 4 Wirick, NW SW SE Section 29-2-7. W. A. Delaney was rigged up to start No. 3 Hardin, NW SW NW Section 30-2-7. Southern Oil Co. is rigged up to make a wildcat Wilcox sand test on the Vierson farm, NE NE SE Section 17-3-7.

Greater Seminole Field

Marathon Oil Co. and Phillips Petroleum Co.'s No. 5 Harjo, NE NE SW Section 26-9-9, Hughes County, had a hole full of water at 4,237-39 feet and was abandoned.

Magnolia Petroleum Co.'s No. 2 Dale, NE SW SW Section 16-7-8, in the Fish Pool, was a 27-bbl. completion at 3,074-3,102 feet.

Magnolia Petroleum Co. had rig up for No. 5 Reed, NW SE SE Section 31-7-8. Stanolind Oil & Gas Co. and Amerada Petroleum Corp. were building rig for No. 2 Sankey-B, NW NW SE Section 31-7-8.

Turman Oil Co.'s No. 1, C SW SW NW Section 29-8-4, had Hunton lime at 4,367-87 feet and produced 1,256 bbls. in 48 hours. It was then acidized and produced 666 bbls. in 15 hours. While flowing through 6⅝-inch casing it produced 187 bbls. in two hours.

Empire Oil & Refining Co.'s No. 2 Davis, C SE SE NE Section 30-7-8, Fish Pool, flowed 731 bbls. in 24 hours from Cromwell sand at 3,005-21 feet.

Slick-Urschel, Inc.'s No. 3 Reed, C SW NW SE Section 31-7-8, had Wilcox sand at 4,160-85 feet and flowed 220 bbls. in one hour.

Logan County

Eason Oil Co.'s No. 1 Herron, C N half NE NE Section 4-16-14w, Crescent Pool, Logan County, was completed in sand at 6,266-90 feet. It started at 321 bbls. per day.

Eason Oil Co.'s No. 4 Katscher No. 2, NW NW SW Section 34-17-4w, is a rig.

Noble County

In the old Billings Pool, in Noble County, C. C. Bennett deepened a well in SW NW SE Section 15-23-2w, to sand at 2,670-82 feet and it started producing 40 bbls. a day. It may be drilled deeper.

Stanolind Oil & Gas Co. and others made a location for No. 1 Frederick, C SW SE Section 28-20-2w, in the eastern extension of the Lucien Pool.

Oklahoma County

Marathon Oil Co.'s No. 1 Dahl, SE cor. Section 31-14-3w, which was completed last September in Wilcox sand at 6,385-6,528 feet and which made 2,315 bbls. of oil in six and one-half hours was opened up and in four hours it produced 1,545 bbls. of oil, with gas at the rate of 84,000,000 feet per day. Stanolind Oil & Gas Co. and Amerada Petroleum Co.'s No. 1 Suneram, NE cor. Section 31-14-3w, also completed last September and which started at 1,703 bbls. in 4 hours and 10 minutes, was opened and flowed 1,355 bbls. in four hours with gas at the rate of 5,500,000 feet per day. No. 1 Messer, the discovery well, was tested and flowed at the rate of 1,116 bbls. per day. It is owned by the Marathon Oil Co. The same company's No. 1 Keefer flowed at the rate of 1,446 bbls. per day, with a gas production at the rate of 37,000,000 feet per day.

The Travis Petroleum Co. extended the Oklahoma City Field nearly half a mile northeasterly with its No. 1 Lucas, NW NE SW Section 36-12-3w. The well swabbed at the rate of 350 to 400 bbls. per day and on Saturday flowing a head of 100 bbls. of oil and then resumed swabbing. Viola lime was topped at 6,362 feet and dolomite and lime at 6,400 feet and the hole was bottomed at 6,617 feet. Two and one-half inch tubing was run to 6,500 feet and the well was swabbed through tubing.

The formations ran low in this test but geologists were not agreed as to whether the location was east or west of the fault which traverses the east side of the Oklahoma City Field. The Sunray Oil Co. and Fain Drilling Co.'s test, No. 1 County, NE NE NW Section 1-11-3w, a half mile south of the Midco well, may settle the geological question. This well recently started drilling.

The Mid-Continent Petroleum Corp.'s No. 1 Young, SE SW NE Section 31-14-3w, a half mile northwesterly extension to the Edmond Pool, flowed 3,024

Wildcat Operations in Oklahoma

Week Ending January 5

NORTHERN OKLAHOMA

BECKHAM COUNTY

Fred Coogan et al's No. 4 Shelton, SW cor. Sec. 33-10-25w.
Rigged up.

CADDO COUNTY

H. W. Lee et al's No. 1 Stacey Ferrell, SW NE NE Sec. 3-6-13w; (2,000-ft. test).
Drlg. 1,080 ft.

Denver Prod. & Ref. Co.'s No. 1 Noe, NW SW SW Sec. 34-10-10w.
T.D. 11,230 ft.; C.O. at 9,500 ft.

COAL COUNTY

J. D. Petty Oil Co.'s No. 1 McMillan, SW NW NE Sec. 16-1s-8.
Sandy shale at 1,000-34 ft.; S.D.

GARVIN COUNTY

Anderson & Kerr's No. 1 Riley, SE SE NW Sec. 2-4-1w (5,300-ft. test).
Pipe set at 128 ft.

Charles Carter and W. S. Key, Inc.'s No. 1 Wood, C NW SW SE Sec. 5-4-3w.
Set surface pipe.

National Prod. Co.'s No. 1 Littrell, NE NE NE Sec. 31-2-3w.
T.D. 1,012 ft.; U.R. 8-in. csg.

GRADY COUNTY

Carter Oil Co. and Magnolia Pet. Co.'s No. 1 Harrison C-34, C NW NW Sec. 23-3-5w.
Drlg. 8,480 ft.

GRANT COUNTY

Helmerich & Payne's No. 1 Crouse, C NE SW Sec. 29-25-3w.
Drlg. 4,640 ft.

HUGHES COUNTY

Dandridge & Crane's No. 1 Mead, NW NW NE Sec. 17-5-9.
Drlg. 250 ft.

Freeman et al's No. 1 Kite, NW NW NE Sec. 8-6-10.
S.D. 164 ft.

Meyers et al's No. 1 Scott, NE SE NW Sec. 23-6-8; (1,000-ft. test).
Sand 585-600 ft.; H.F.W.

Turner et al's No. 1 Williams, SW cor. Sec. 25-7-10.
Rig.

KAY COUNTY

Harris & Haun's No. 1 Schuessler, C NW SW Sec. 3-28-2.
Drlg. 150 ft.

Bay Oil Co.'s No. 1 Holden, SW SW SE Sec. 14-28-3.
Chat 3,136-73 ft.; swabbed 125 bbls.; P.B. to sand at 2,980-92 ft.; shot with 80 qts.; Swabbed 153 bbls.

Carter Oil Co.'s No. 1 Fowler, C NE Sec. 12-27-1e.
Sand 3,564-65 ft.; showing oil; reaming pipe.

Lancer Oil Corp.'s No. 1 Hugo, SE NW NW Sec. 22-28-5.
Location.

S. R. McCorkle et al's No. 1 Smith, SW cor. Sec. 6-26-4.
Spudded.

KINGFISHER COUNTY

Black Gold Oil Co.'s No. 1 Cole, C SW NE Sec. 24-18-5w.
Drlg. 2,900 ft.

LINCOLN COUNTY

Tom Bennett et a's No. 1 Boiby, C SE SW Sec. 27-12-2.
Cored 5,065-81 ft.; S.D. for csg.

Derrickson and Reserve Pet. Co.'s No. 1 Law, SE SW NE Sec. 25-14-3.
Sand 5,020-30 ft.; 181 bbls. in 24 hrs.

Chester L. Carlock's No. 1 Young, C N½ NW NW Sec. 23-15-5.
Rig.

Sinclair Prairie Oil Co.'s No. 1 Hoyt, NW SW NE Sec. 5-14-3.
Wilcox sand 5,062-71 ft.; flowed 200 bbls. in 24 hrs.; T.D. 5,113 ft.

Sinclair Prairie Oil Co.'s No. 1 Boland, SW cor. Sec. 25-12-3.
Second Wilcox 5,536-61 ft.; H.F.W.

LOGAN COUNTY

Helmerich-Payne et al's No. 1 Sturgis, SE NW.
Drlg. 4,730 ft.

Shell Pet. Corp. et al's No. 1 Hirzel, SE SW SW Sec. 7-16-2w.
Drlg. 3,040 ft.

Sinclair Prairie Oil Co. et al's No. 1 Dunbar, Sec. 25-15-4w.
Mississippi lime 6,228 ft.; T.D. 6,253 ft.; fishing.

Sinclair Prairie Oil Co. et al's No. 1 School Land, SE cor. Sec. 36-17-1w.
Hunton 5,940 ft.; cored to 5,986 ft.; set 9-in. csg. 5,967 ft.

NOBLE COUNTY

Marathon Oil Co.'s No. 1 Gilbert, NE cor. Sec. 24-22-2.
T.D. 4,258 ft.; cmtg. cave.

Sinclair Prairie Oil Co.'s No. 1 Cawood, C SW NW Sec. 27-20-2w.
Viola 4,970 ft.; set 7-in. csg. 4,939 ft.; T.D. 4,983 ft.; flowed 907 bbls. of 41 grav. oil in 24 hrs. by heads; comp.

OKFUSKEE COUNTY

Amerada Pet. Corp.'s No. 1 Jaynes, NW NW SW Sec. 20-10-10.
Sand 640-60 ft.; show of gas; drlg. 910 ft.

Mid-Continent Pet. Corp.'s No. 1 Haney, SW SE NE Sec. 24-12-8.
Rigged up.

(Continued on Next Page)

bbls. of oil through a 4-inch choke in five hours. It had Wilcox sand at 6,531-6,625 feet.

In the Oklahoma City Pool, Banner Production Co.'s No. 2 Bell, NW NE Section 27-11-3w, made a potential production of 124 bbls. in four hours on the gas lift from sand at 6,542-63 feet.

Ray Stephens and Marayduth Oil Co.'s No. 1 Stamper, SW NE SW Section 22-11-3w, swabbed 630 bbls. in 24 hours from sand at 6,416-86 feet.

Okmulgee and Muskogee Counties

C. D. Klinginsmith's No. 1-A Adams, C N half NE SW Section 35-16-11, was shot in Burgess sand at 2,363-2,404 feet, but the hole bridged.

A. Lippschitz drilled to 560 feet and shut down No. 1-A Evans, SW cor. SE Section 8-14-18, Muskogee County. Stekoll and others have machine in for No. 12 Lewis, NW SW NE SE Section 20-15-14, Okmulgee County.

Hawkins & Greenfield completed a 70-bbl. well in No. 2 Smith, C NE SW Section 19-13-13, in Booch sand at 1,583-95 feet.

J. S. Routt and others' No. 1 Clans, SE NE SW Section 20-14-12, was shot in Wilcox sand at 2,743-53 feet, but got no commercial production and the hole was abandoned. It had been deepened from 2,157 feet.

J. Feltz' No. 1 Kilgore, NE NE SE Section 17-14-17, Muskogee County, an old well deepened to sand at 1,912-14 feet, swabbed 40 bbls. of 42 gravity oil in one day and was completed.

Wigton and others' No. 1-A Doyle, SW cor. Section 5-15-12, was dry in Wilcox sand at 2,677-80 feet and was abandoned.

Aggas Drilling Co.'s No. 2 Isabel, SW NW SW Section 16-15-14, was shot in sand at 841-63 feet and produced 40 bbls. of oil and 120 bbls. of water. It was completed.

Dodge Brothers' No. 6 Harrod, SE NE SE Section 17-15-14, was dry and abandoned at 882 feet.

Stekoll and others' No. 5 Lewis, NE cor. SE Section 17-15-14, was a 15-bbl. completion in sand at 1,666-71 feet. It is an old well deepened.

Creek County

Curtis Oil Co. completed a 3-bbl. well in No. 1 Edgerton, C NW SE Section 6-17-10, Creek County. Other Creek County completions recently recorded include the following:

Big Four Oil Co.'s No. 1 Hope, NW SW SW Section 35-19-8, sand at 2,590-2,626 feet, 80 bbls.

O. M. Ireland and others' No. 1 Willis, NW SW NE Section 11-18-9, dry and abandoned at 3,044 feet.

Bay State Oil Co.'s No. 5 Mills, NE NE SW Section 3-17-8, sand at 1,380-1,419 feet, 125 bbls.

Bay State Oil Co.'s No. 1 Stoffer, NW SW NW Section 10-17-8, sand at 1,371-1,400 feet, 75 bbls.

W. C. McBride, Inc. has rig up for No. 30 Klein, SW cor. Section 8-18-7, in the Cushing Pool. F. O. Akin spudded No. 1 King, SE NE SW Section 35-18-7. Bay State Oil Co. had a fishing job in No. 4 Lasley, recently started, NE SE NW Section 3-17-8, and was rigging up No. 5 Lasley, SE SW NW Section 3-17-8. Jones Doss and others' No. 1 Turkey, NE SW SE Section 35-17-9, was spudded.

Osage County

Sinclair Prairie Oil Co. had a hole full of water from sand at 1,810-18 feet in No. 1, NW SE NW Section 4-22-9, Osage County, and also lost the tools in the hole. It was abandoned.

Finance Oil Co.'s No. 1, 1,320 feet from the north and 810 feet from east lines of SW Section 19-23-9, made 250 bbls. in seven hours from Siliceous lime at 2,478-80 feet.

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Wildcat Operations in Oklahoma

(Continued from Preceding Page)

OKLAHOMA COUNTY

R. Carl Larkin's No. 1 Brobine, NW NW NE Sec. 23-13-5w.
Moving in tools.

J. C. Shaffer et al's No. 1 Bullard, SW cor. Sec. 13-13-2w; (Wilcox test).
Oswego at 5,666 ft.; drlg. 5,887 ft.

Springrose Drlg. Co.'s No. 1 Edwards, C SE Sec. 19-11-1.
T.D. 6,540 ft.; P.B. to 5,500 ft.

OSAGE COUNTY

Peters Pet. Co. and Norbla Oil Co.'s No. 1, SW cor. Sec. 15-25-5.
H.F.W. 3,040 ft.

PAYNE COUNTY

Marathon Oil Co.'s No. 1 Potts, C SW SW Sec. 27-19-2.
Drlg. 3,950 ft.

PITTSBURG COUNTY

McAllister Pet. Corp. et al's No. 1 Chunn, C SE NW Sec. 29-4-14.
T.D. 3,015 ft.; cmtd. off cave at 1,500 ft.

P. H. Gray et al's No. 1 Lee, NW SE Sec. 12-5-12.
Drlg. 615 ft.

PONTOTOC COUNTY

E. M. Blanchard's No. 1 Crabtree, NE SE NE Sec. 27-3-6.
S.D. 2,920 ft.

Dixie Oil Co., Inc.'s No. 1 Graham, SW SE SW Sec. 13-1-7.
Drlg. 150 ft.

Gillett & Kroeger's No. 1 Robbins, NE SE Sec. 31-1-4.
Machine.

Gillette & Kroeger's No. 1 Duver, NW SE Sec. 26-1n-6e.
T.D. 784 ft.; S.D.

H. M. Marcum's No. 1 Magnuson, SW SE SE Sec. 23-2-7.
Set 12-in. csg. 425 ft.; testing.

J. D. Sledge and Jack Lynch's No. 1-A (twin) Thompson, SW NE SW Sec. 1-1n-7e.
2,000 gals. acid; flowed 112 bbls. net oil and 65 bbls. water in 24 hrs.

Southern Oil Corp.'s No. 1 Ladd, C NW NW Sec. 27-3-7.
Sylvan 1,770 ft.; drlg. 1,775 ft.

POTTAWATOMIE COUNTY

Blackgold Pet. Co.'s No. 1 Bizzell, C NE NW Sec. 15-7-3.
Hunton 4,430 ft.; T.D. 4,432 ft.; flowed 70 bbls. oil in 3 heads.

SEMINOLE COUNTY

Atlantic Oil Prod. Co. et al's No. 1-A Thompson (community test), SW SE SE Sec. 15-11-8.
Drlg. 650 ft.

Ray Dorris and J. T. Hall's No. 1 Dorris, SE SE SW Sec. 31-10-7.
Spudded.

Harris and Haun's No. 1 Harjo, NE SE NW Sec. 11-6-6; (O.W.P.B.).
P.B. to 2,115 ft.; F.F.W.; S.D.

Gypsy Oil Co.'s No. 1 Grayson, SW NW Sec. 13-6-5.
Mayes 3,280 ft.; drlg. 3,340 ft.

Verser & Clay et al's No. 1 Thomas, NE SE NW Sec. 1-6-6.
T.D. 2,422 ft.; S.D.

Wofford Drlg. Co. et al's No. 1 Abbott, NE cor. Sec. 33-8-7.
Rig.

Wofford Drlg. Co. et al's No. 1 Thomas, NW SE Sec. 8-6-7.
Rig on ground.

TEXAS COUNTY (PANHANDLE)

Ben F. Ash et al's No. 1 Guymon Townsite, C NE SE Sec. 30-3n-15e; (Cimarron Meridian).
T.D. 2,420 ft.; fishing for drill pipe.

WASHITA COUNTY

Okla.-Midwestern Oil Co.'s No. 1 Dock, SW cor. Sec. 21-8-13w.
T.D. 2,420 ft.; lost tools in hole; rig rebuilt; S.D.

Anadarko Basin Oil Co.'s No. 1 Wolf, NE SW Sec. 23-9-17w.
Rigged up and S.D.

SOUTHERN OKLAHOMA

ATOKA COUNTY

Brookshire et al's No. 1 Rowland, NW NE NE Sec. 13-3-10.
H.F.W. 3,344 ft.; will abd.

Malernee et al's No. 1 D. O. K. Land Co., C SE SE Sec. 36-2s-13.
S.D. 3,115 ft.

BRYAN COUNTY

Hankin & Williams' No. 1 Slagg, SE SW SE Sec. 20-6s-13e.
T.D. 927 ft.; H.F.W.; S.D.

C. B. Welch's No. 1 Collins, SW cor. NE NE SE Sec. 19-5s-8e.
Machine.

CARTER COUNTY

Daphfine Oil Co.'s No. 1 Hooks, SE NW NW SE Sec. 5-1s-2w.
T.D. 3,281 ft.; will test sand 1,075-1,135 ft.

CHOCTAW COUNTY

J. V. Scrivener et al's No. 1 Swink, C NE SE Sec. 29-6s-20e.
S.D. 310 ft.

COMANCHE COUNTY

F. F. Stevens' No. 1 Green, SE SW Sec. 2-1-13w.
T.D. 1,210 ft.; fishing.

Heiden & Taylor's No. 2 Crutcher, C NE Sec. 11-1n-12w.
T.D. 362 ft.

JACKSON COUNTY

Burk Royalty Co.'s No. 1 Gore, SE NW SE Sec. 3-1s-20w.
Drlg. 1,909 ft.

Gypsy Oil Co.'s No. 1 Stokes, SE NW SW Sec. 11-1-20w.
Lime 1,709-11 ft.; T.D. 1,722 ft.; S.D.

Gypsy Oil Co.'s No. 1-A (twin) Kelly, NE cor. Sec. 10-1n-20w.
P.B. to 1,424 ft.; will be used as a gas well.

Gypsy Oil Co.'s No. 1-B Kelly (twin), 330 ft. S and 280 ft. W, SE cor. Sec. 10-1n-20w.
Oil sand 1,412-24 ft.; swbd. 68 bbls. of 43 grav. oil in 12 hrs.; S.D. for tankage.

JEFFERSON COUNTY

Geo. Pace et al's No. 1 Jack, NE NW NW Sec. 10-4s-4w.
T.D. 3,031 ft.; testing pipe.

JOHNSTON COUNTY

W. A. Delaney et al's No. 1 Diamond, NW NE SE Sec. 5-1s-8.
Rigging up.

MARSHALL COUNTY

Paul Robb's No. 1 Vittetoe, C NE SE Sec. 11-5s-4e.
T.D. 4,942 ft.; recovered core barrel; S.D.

McCURTAIN COUNTY

J. V. Schrivener et al's No. 1, NE SW SW Sec. 24-6s-21.
Machine.

MURRAY COUNTY

Equitable O. & G. Co.'s No. 1 Scott, CSL N½ NW SW Sec. 15-1s-3.
12-in. 44 ft.

Manahan et al's No. 1 Ward, NE SE NW Sec. 12-1s-3; (Wilcox sand test).
Spudded.

T. E. Revell et al's No. 1 Wolfe, NE cor. Sec. 13-1-2.
Sand 2,658-70 ft.; show of oil; T.D. 2,710 ft.; U.R. 5-in. csg. at 2,565 ft.

C. P. Williams et al's No. 1 Singleterry, SE SW NW Sec. 25-2s-3e.
T.D. 743 ft.; S.D.

STEPHENS COUNTY

Wm. Angle's No. 1 Johnson, NE cor. SE Sec. 17-1n-8w.
T.D. 2,473 ft.; 7,000,000 ft. gas; spraying little oil and wtr.

Dixie Oil Co., Inc.'s No. 1 Graham, SW SE SW Sec. 13-1n-7w.
Drlg. 595 ft.

J. W. Madison's No. 1 Tussey, SW SE NW Sec. 24-1n-4w.
Rig down, drill pipe in hole; T.D. 3,220 ft.

SE SE Section 26-23-10, is a 20-bbl. completion in Bartlesville sand at 1,724-50 feet.

Gillespie & Sons will deepen their No. 23, C E half E half NE Section 8-20-12, old depth 2,174 feet, and Idaho Oil Co. will deepen No. 5, C S half S half Section 11-21-11, old depth 2,255 feet.

A. H. Kasishke's No. 4, NE SE NW Section 21-25-6, was dry and abandoned at 2,970 feet.

Okfuskee County

Completions in Okfuskee County include the following wells:

Carter Oil Co. and others' No. 1 Van Pelt, NE NW SE Section 9-12-11, Wilcox sand at 3,516-23 feet, 25 bbls.

Champlin Refining Co.'s No. 5 Douglass, SE NE SW Section 22-11-11, dry and abandoned at 2,657 feet. It is an old well deepened from 2,650 feet.

Wells and others' No. 6 Moore, C SW NE Section 14-10-11, sand at 2,140-50 feet, 150 bbls.

Stekoll and others were drilling at 265 feet in No. 5 Johnson, SW NE SE Section 2-10-11.

In Southern Fields

In Carter County, Skelly Oil Co.'s No. 1 Pierce-B, SW SW NE Section 17-2s-2w, was completed. It produced 145 bbls. in 18 hours, the oil being of 26 degree in gravity. Sand lay at 2,491-2,541 feet.

First reports in the southern counties included the following: Schermerhorn Oil Co.'s No. 33 fee, 409 feet from the north and 180 feet from west lines of SW Section 5-4s-3w, Healdton Field, a machine; H. F. Potts' No. 1 Nichols, SW SW NW Section 32-2s-9e, Atoka County, a location for a 3,200-foot test, with machine on the ground; George Pace and others' No. 16 Watkins, SW NE SE Section 21-2s-7w, Stephens County, drilling at 1,637 feet; Equitable Oil & Gas Co.'s No. 1 Scott, CSL N half NW SW Section 15-1s-3e, Johnston County, 12½-inch surface pipe set; Manahan and others' No. 1 Ward, NE SE NW Section 18-1s-3e, Murray County, spudded; Western Oil Co.'s No. 2-B Brown, CNL SW NE Section 30-1s-8w, Stephens County, drilling at 1,682 feet; Associated Oil Co.'s No. 1 Williams, SW cor. Section 19-1s-20w, Jackson County, a 3,000-foot test, moving in machine; Scrivener and others' No. 1 Central Life, SEL NE SW SW Section 34-6s-21e, McCurtain County, drilling at 200 feet; Beard & Kolb's No. 4 Wade, SW cor. NE Section 11-2s-8w, Stephens County, a rig.

Palo Duro Oil Co. made a location for No. 1 Ealum, SE SE SW Section 16-2n-21w, Jackson County. Harrell David & Co. have rig on the ground for No. 1 O. O. Sneed, SW SW NW Section 1-1n-20w, Jackson County, and Gypsy Oil Co. has slush pits dug for No. 1 Edwards, SE SE SE Section 3-1n-20w, and for No. 1 Hensley, NE NE NW Section 10-1n-20w.

EAST TEXAS GEOLOGISTS

FORT WORTH, Tex., Jan. 7.—Members of the East Texas Geological Society, composed of geologists with headquarters at Tyler, are expected to tour McLennan, Hill and Navarro Counties this month following announcement that the Humble Oil & Refining Co. had leased 20,000 acres in McLennan County, 7,000 in Hill County and 5,000 in Navarro.

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Michigan Fields

(Continued from Page 54)

tion 3 miles east of production in the Porter Pool. The new tests will be drilled as the No. 1 Rosa and Archie Beougher, C S NW SW Section 25-13n-1e, and the No. 1 Mary LaLonde, C S NW SW Section 27, same township. Materials have been moved in for the Beougher test, located about 3 miles east of the No. 1 Moran, which was drilled in Section 28.

A rig also has been moved to the Carrie B. Walton Neal farm, SE NE SE Section 13-16n-2w, Warren Township, Midland County, where Howard L. Foster and J. V. Wicklund have engaged J. W. McIntosh, contractor to drill a well. Permit for this test also was issued last week. It is located 8 miles southeast of the Kintner, Beaverton Township, Gladwin County, discovery.

Sherman Drilling Co. also has obtained a permit for the No. 1 Elias Scheibe, C NW SE Section 13-15n-7w, Sheridan Township, Mecosta County, another wildcat location.

J. W. Leonard, Jr., and others will drill No. 2 Stanley Demski, SW SE SE Section 28-15n-3w, Denver Township, Isabella County, while Michigan Cities Natural Gas Co. has taken out permits for two new gas tests in Broomfield Township, Isabella County, namely: No. 1 Paul R. Lueder, C NE NE Section 14-14n-6w, and No. 1 William J. Cook, C SW SE Section 2-14n-6w.

New Locations

Two permits were taken out by the Prudential Oil & Gas Corp. as follows: No. 1 Walter and Paul Gussman, SE NE SE Section 24-22n-1e, Ogemaw Township, Ogemaw County, and No. 1 Harry T. and Gertrude I. Hansen, C NE NW Section 1-11n-6w, Day Townsite, Montcalm County.

Pure Oil Co. also received two permits, one for the No. 4 Bond-Root, C N NW NE Section 3-13n-2w, Jasper Township, Midland County, and the other for the No. 4 H. H. Peek, SE SW NW Section 16-13n-1w, Porter Township, Midland County.

Edward Stewart took out the last permit of the year, No. 2,300, for the No. 1 Stewart-Atha-McDonald, C W NW NE Section 25-16n-4w, Vernon Township, Isabella County.

Sun Oil Co.'s No. 1 Mary A. Hines, C NW NE Section 31-17n-1w, Tobacco Township, Gladwin County, was the first permit of the new year completing the list.

It was reported a group of farmers were preparing to drill on the Beck farm in Section 29-10n-3w, Newark Township, Gratiot County, about 5 miles southwest of the village of Ithaca.

Rig is still on location for a project in Oceana County, a test started by John B. Northcott and others on the No. 1 Wright heirs, Section 31-15n-16w, Elbridge Township, but delayed by court action.

Eastern Fields

(Continued from Page 52)

No. 3 on the A. E. Ryan farm which was being deepened. Clem S. Morris has reached 1,947 feet on the Morris and Carter lease. In Grant district, Mellon Brothers have reached 1,700 feet in deepening No. 6 on the Conoway and Patton lease.

In Roane County, Heck Oil Co. cleaned out and shot No. 2 on the W. H. Enoch heirs farm on Sugar Camp Run in Reedy district, and increased production from 2 to 8 bbls. a day. In Smithfield district, Spencer Natural Gas Co. has made a location on the R. R. Young farm. Here, Howard Bartlett is down 1,000 feet on the C. C. Brannon farm. In Curtis district, Reedy Oil & Gas Co. is rigging up on the Lizzie Moore farm. W. B. Heeter is drilling at 920 feet on the W. B. Heeter and others lease. In Spencer district, George E. Smith is down 400 feet in a second test on the L. A. Short farm.

SEEKING JACK THORN

Jack Thorn, an oil broker and storage steel contractor, who disappeared from El Dorado, Ark., October 7, 1926, is being sought by A. F. House, Little Rock, Ark. Thorn was 5 feet 10 inches in height, weight, 160 pounds, light brown hair, age now about 47. He has a scar on left cheek resembling a dimple.

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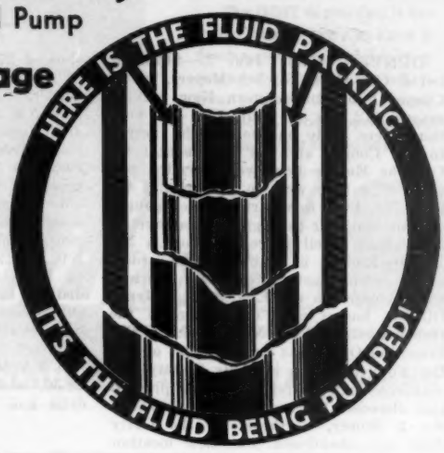

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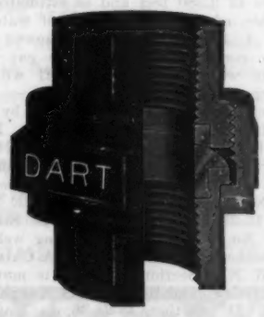

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The Fairbanks Co.,—Distributors

Eunice Pool Extended One-Third Mile to West; Carbon County Wildcat Looks Like Producer

By TOLBERT R. INGRAM
Staff Correspondent, Rocky Mountain Area

DENVER, Colo., Jan. 7.—Stanolind Oil & Gas Co.'s No. 3-A Meyers, in the Cooper Pool, southeastern New Mexico, gauged 112 bbls. an hour. Two new locations were made on the Vaughn permit in the Cooper area by Continental Oil Co. The Eunice Pool was extended one-third of a mile west in Continental Oil Co.'s No. 18-A Lockhart-2, which gauged 44 bbls. an hour through a three-fourths-inch choke. Shell Petroleum Corp.'s No. 1 State-Endura is shut down for orders after showing water. Four new locations were released in the Eunice area. Gypsy Oil Co. has a near completion in the Hobbs Pool in No. 1 North Grimes. The Stanolind Oil & Gas Co.'s wildcat on the Big Eddy anticline in Eddy County, encountered salt water and was plugged and abandoned. Flynn, Welch & Yates' No. 2 Storey, northeast of the Getty Pool, was abandoned. One new location was made in Guadalupe County.

Stanolind Oil & Gas Co. has a near completion in its No. 22-8D Shaw on the Iles Dome, Colorado. One well was abandoned in Fremont County.

In Wyoming, California Exploration Co.'s wildcat on the Waugh Dome in Hot Springs County, is shut down until spring without testing a show estimated at several hundred barrels a day in the Embar. Argo Oil Co.'s wildcat on O'Brien Springs structure in Carbon County, is drilling in and looks like a producer.

Two completions and one new location were reported in the Cut Bank Field in Montana. Most of the operations are shut down for the winter.

Ramsey Petroleum Corp.'s discovery in Emery County, Utah, will be plugged back and completed as a gas well.

NEW MEXICO

Cooper Area

One completion was reported in the Cooper area in Stanolind Oil & Gas Co.'s No. 3-A Meyers, C SW NE Section 22-24-36, which gauged 112 bbls. an hour with 15,000 feet of gas through the 3-inch tubing at 3,544 feet. Total depth is 3,558 feet.

Phillips Petroleum Co.'s No. 10 Woolworth, C NE NW Section 26-24-36, is a near completion and is swabbing in through the 2½-inch tubing at 3,490 feet. Total depth is 3,494 feet and 7-inch was cemented at 3,477 feet with 400 sacks. Before cementing pipe it made 40 bbls. an hour and is expected to be a much better well than this test indicated.

Gypsy Oil Co.'s No. 1 Cooper, C SW NE Section 23-24-36, on the east side, estimated at 400 bbls. a day before the water began coming in, is shut down for orders at 3,580 feet and is estimated at 30 bbls. of oil and 150 bbls. of water a day. A Schlumberger test showed the water coming from above the pay and efforts were made to shut off with a packer.

Two new locations were staked by the Continental Oil Co. in its No. 14-A Vaughn-2, C SE SW Section 14-24-36, a north offset to its No. 1 Gates and a west offset to Humble's No. 3 Cooper, and No. 15-A Vaughn-2, C SW SE Section 15-24-36, a north offset to Stanolind's No. 5-A Meyers, a drilling well.

Continental Oil Co.'s No. 23-A Gates-2, C NW NW Section 23-24-36, is moving in materials, and its No. 15-A Vaughn-1, C SE SE Section 15-24-36, is moving in materials. Humble Oil & Refining Co.'s No. 3 Cooper, C SW SE Section 14-24-36, at the north end of the development, was tested at 3,594-3,697 feet, the latter being the total depth, and showed 270 feet of mud and 1,260 feet of sulphur water. It probably will drill deeper. Same company's No. 1 Coats, C NW NE Section 10-24-36, is fishing for drill stem at 3,355 feet. Simms Oil Co.'s No. 1 Woolworth, C SE NE Section 35-24-36, is drilling at 2,800 feet in brown lime and trying to prevent a gas blowout. Texas Co.'s No. 2 Ogg, C NW NE Section 35-24-36, is drilling at 2,400 feet in salt, and its No. 3 Ogg, C SW NW Section 35-24-36, set the 9⅝-inch at 1,366 feet with 1,000 sacks and is drilling in salt at 1,643 feet. Stanolind Oil & Gas Co.'s No. 4-A Meyers, C NE SW Section 22-24-36, is drilling at 1,970 feet in anhydrite and salt, and its No. 5-A Meyers, C NW NE Section 22-24-36, is drilling at 1,665 feet in anhydrite and salt.

Eunice Area

The proven area of the Eunice Pool was extended one-third of a mile west by Continental Oil Co.'s No. 18-A Lockhart-2, C SW SE Section 18-21-36. It was completed at 3,924 feet, total depth, for an initial production of 44 bbls. of oil an hour and 1,450,000 feet of gas through a three-fourths-inch choke on the 2½-inch tubing at 3,923 feet. Top of the pay was at 3,850 feet and elevation is 3,635 feet. This is the only well drilled in Section 18 since the Continental company's No. 1-A Lockhart, in the southeast corner, was completed in January, 1931, for 500 bbls. at 3,990 feet.

Shell Petroleum Corp.'s No. 1 State-Endura, C SE NE Section 12-21-35, is shut down for orders after deepening to 3,909 feet and making drill stem tests. It showed for 5 joints of water at 3,750-75 feet; 90 feet of drilling mud and a show of oil at 3,775-3,830 feet; 200 feet of oil, gas and water at 3,825-80 feet; and 35 feet of mud, no gas and a show of oil at 3,875-3,909 feet. It will set the 7-inch at 3,800 feet and test.

Atlantic Oil Co.'s No. 1-F State, C SW SW Section 29-21-36, was drilled to 3,932 feet, in lime, and treated with 2,000 gallons of acid. It tested 75,000 feet of gas and probably will drill deeper.

Four new locations were released. The Gypsy Oil Co.'s No. 3 Bell-State, C SW SW Section 9-21-36, is digging cellar and pits and its No. 1 Houston, C SE SE Section 7-21-36, is a location. The last named extends the drilling northwest, this being the first well in the section and a north and west offset to two drilling Continental wells. Atlantic Oil Co.'s No. 1-D State, C NW SE Section 20-21-36, and General Crude Oil Co.'s No. 1 State, C NW SW Section 32-21-36, are locations.

Peerless Oil & Gas Co.'s No. 1 State, C N WSW Section 29-21-36, was drilled to 3,951 feet, in lime, and had a show of oil and gas. The 7-inch was then run to 3,850 feet and cemented with 250 sacks. It probably will be acidized. Skelly Oil Co.'s No. 1-B State, C NW NW Section 16-21-36, cemented 7-inch at 3,555 feet with 750 sacks and is coring in lime at 3,890 feet. It had a show of gas at 3,830 feet. Same company's No. 1-C State, C NE NW Section 29-21-36, is bottomed at 1,805 feet and is waiting after cementing the 8⅝-inch at 150 feet with 500 sacks.

The Continental Oil Co.'s No. 18-A Meyers-1, C NE NE Section 18-21-36, is building derrick, and its No. 8-A Meyers-3, C SW SW Section 8-21-36, is waiting after cementing the 10¾-inch on bottom at 333 feet with 150 sacks. Same company's No. 30-A Lockhart-1, C SE NE Section 30-21-36, is drilling at 3,554 feet in lime, and its No. 17-A Meyers-4, C NE SW Section 17-21-36, is agitating on pump, but has taken no gauge. It is bottomed at 3,997 feet, where it was estimated at 200 bbls. after being treated several times. Tide Water Oil Co.'s No. 3 State-Foster, C NW NE Section 8-21-36, is drilling at 1,400 feet in anhydrite, and its No. 4 Coleman, C SE NE Section 17-21-36, plugged back from 3,933 feet to 3,927 feet and is testing. Old depth was 3,943 feet where it showed water. Shell Petroleum Corp.'s No. 1-B State, C NW NW Section 29-21-36, is rigging up rotary, and Gypsy Oil Co.'s No. 2 Bell-State, C SE SE Section 8-21-36, is running 4½-inch at 3,916 feet, total depth.

Jal Area

R. H. Henderson and others' No. 1 Ogg, C NW NE Section 11-25-36, is shut down after spudding to 5 feet, and his No. 11 Langley, C SE SE Section 8-25-37, is shut down after spudding to 15 feet.

Continental Oil Co.'s No. 12-A Wells-2, C NW NE Section 12-25-36, which showed a small quantity of oil, gas and water after plugging back from 3,518 feet to 3,480 feet, after drilling out to 3,496 feet, is swabbing. Same company's No. 13-A Sholes-2-X, NW cor. SE Section 13-25-36, is drilling at 2,840 feet in brown lime. Repollo Oil Co.'s No. 2 Hanagan, NE cor. SW Section 12-25-36, is drilling at 3,078 feet in lime. E. B. Guess' No. 1-B Justis, SW NW NW Section 20-25-37, is shut down at 1,060 feet, and his No. 1-B Conditt, NW NE SE Section 11-25-36, is shut down at 517 feet. Southern Petroleum Exploration Co.'s No. 2 Ascarate, C SE NW Section 24-25-36, set 12½-inch at 121 feet with 150 sacks and is drilling at 350 feet in sand.

Hobbs Area

Gypsy Oil Co. has a near completion in its No. 1 North Grimes, SW cor. Section 21-18-38, which is bottomed at 4,070 feet in lime and testing pipe after cementing the 7-inch at 4,067 feet with 650 sacks.

Amerada Petroleum Corp. and Skelly Oil Co.'s No. 1-A State, NE SW NW Section 24-18-37, is drilling at 1,671 feet in anhydrite and red beds, and J. P. Cusack and others' No. 1 Moon, SW cor. NE Section 28-18-38, began spudding on December 27. Shell Petroleum Corp.'s No. 2-D State, SE NE NW Section 24-18-37, is still a location, and its No. 2 Sanger, SW SE SW Section 27-18-38, set 9⅝-inch at 1,648 feet with 350 sacks and is drilling at 1,725 feet. Continental Oil Co.'s No. 2 Grimes, SE SE Section 28-18-38, is drilling at 3,293 feet in sandy lime, and National Securities Oil Co.'s No. 1 Linam, NE SE SW Section 33-18-37, is cleaning out at 4,195 feet.

San Simeon Area

Humble Oil & Refining Co.'s No. 1 Saunders, C NE NE Section 4-22-34, is rigging up cable tools.

Maljamar Area

Maljamar Oil & Gas Co.'s No. 4 Baish, NE SE NE Section 21-17-32, is drilling at 3,560 feet in sandy lime.

Caprock Area

Vierson & Brown's No. 1 Robinson, C NW SE Section 14-11-32, is building derrick.

Lea Area

Texas Co.'s No. 1 Swearingin, C NE SW Section 8-20-34, a wildcat 4 miles west and north of the discovery well in the North Lea extension, is shut down at 3,399 feet for engine repairs, and its

IMPORTANT BOOKS
for the Oil Man's Library

"FEDERAL INCOME AND ESTATE TAX LAWS"

Recognizing the need for some form of publication that would be useful for both attorney and layman in matters relating to income tax, Walter E. Barton and Carroll W. Browning, members of the Bar of the Supreme Court of the United States and of the District of Columbia, prepared the "Federal Income and Estate Tax Laws" in a correlated and annotated form, bringing up-to-date the many laws relating to this subject. Their sixth edition of the book is just off the press.

This latest edition follows the same plan as used in the former editions and covers the last six revenue acts with amendments. They are arranged in such a manner as to permit of direct comparison of the different sections of all sections of the 1921, 1924, 1926, 1928, 1932 and 1934 Income Tax Acts and the Estate Tax acts of 1916, 1917, 1918, 1921, 1924 and 1926 with Amenments.

Special reference is made to many decisions rendered covering matters pertaining to the petroleum industry, and for that reason the book should prove of value to all persons interested in this industry. The book contains 660 pages and is published in the usual form of a law book, bound in buckram.

"Federal Income and Estate Tax Laws" may be purchased through the Book Department of The Oil and Gas Journal at the regular established price of $10.00, express prepaid. A copy will be forwarded promptly upon receipt of check or money order for that sum. Where no payment accompanies the order, the book will be sent express c.o.d.

No. 1 Moore, C NW SE Section 21-20-32, is drilling at 190 feet in red beds. Same company's No. 1 Elliott, C NE NE Section 22-20-34, which showed for 6 bbls. a day at 3,701 feet, is preparing to swab at 3,710 feet after treating with 1,000 gallons of acid. Same company's No. 4-A Lynch, C SE NE Section 34-20-34, is bottomed at 3,758 feet and making approximately 10 bbls. of oil and 5 bbls. of water a day. R. H. Henderson and others' No. 1 Russell-Steele, C NE NW Section 24-20-33, is shut down after spudding to 8 feet, and Ryan Consolidated Petroleum Co.'s No. 1 Acree, C NE NW Section 35-20-32, is rigging up cable tools.

Eddy County

Stanolind Oil & Gas Co.'s No. 1 Duncan, CEL SE SW Section 30-21-30, a wildcat test of the Big Eddy anticline in eastern Eddy County, proved to be a failure and was plugged and abandoned at 3,656 feet in sand. It had 1,000 feet of salt water at 3,649-56 feet. It topped the salt at 343 feet and found the base at 3,167 feet. The top of the Delaware was at approximately 3,455 feet. The elevation is 3,320 feet.

Flynn, Welch & Yates' No. 2 Storey, C NE SW Section 30-19-30, northeast of the Getty Pool, a wildcat, had 1,450 feet of sulphur water at 1,806-08 feet, in lime, and was plugged and abandoned at last named depth.

Getty Oil Co.'s No. 7 Dooley, SW cor. Section 24-20-29, Getty Pool, is digging cellar and pits. Neal Wills and others' No. 1 Montgomery, SW NE Section 10-23-30, Salt Lake district, is shut down in anhydrite at 2,170 feet. Flynn, Welch & Yates' No. 71 State, C SW NE Section 10-19-28, Artesia district, is drilling at 960 feet in gypsum and red shale.

San Juan County

J. F. Cross and others' No. 1 Wilson, SW cor. SE Section 17-30-11, Aztec district, is shut down at 810 feet with the 6⅝-inch at 695 feet, and same firm's No. 6 Duggan, NE cor. Section 20-29-11, is shut down at 647 feet. Last named had an oil show at 645-47 feet. Aztec Oil Producers, Inc.'s No. 1 Clark, S SE SE Section 28-30-11, is shut down at 1,535 feet. Meier & Culberson's No. 1 Lemley, NE SE SE Section 32-30-11, is shut down at 1,314 feet with the 4½-inch on bottom. It had a show of oil at 1,310-14 feet. H. C. Stratton's No. 1 Hart, SW NE SE Section 25-30-12, is shut down at 1,440 feet. W. R. Webb's No. 1 fee, E NE NW Section 6-30-11, is drilling at 570 feet.

Guadalupe County

Anton Chico Development Co., Ltd.'s No. 2 fee, NW NE SW Section 20-9n-17, Anton Chico grant, is preparing to build rotary rig. Location is about 300 feet west of No. 1 in which hole was lost at 2,587 feet.

LEGAL

Department of the Interior, U. S. Land Office, Las Cruces, New Mexico. Notice is hereby given that Baish Field Unit W½, W½ SE¼ Sec. 15, T. 17 S., R. 32 E., N.M. P.M., and Eaves Field Unit W½ W½ Sec. 24, W½ NW¼, SE¼, NW¼ Sec. 25, T. 26 S., R. 36 E., N.M.P.M., New Mexico, are offered to the qualified bidder of the highest amount offered per acre as a bonus for the privilege of leasing the land under section 17 of the act of February 25, 1920 (41 Stat. 437), at the customary royalty scale in the standard lease form, at the sale to be held in the United States Land Office in Las Cruces at 10: A.M., on January 14, 1935. Any lease issued will be subject to the regulations governing the sale of leases approved September 22, 1932, and to compliance with the Code of Fair Competition for the Petroleum Industry as signed by the President on August 19, 1933, and any modifications thereto heretofore or hereafter made, and to abide by the provisions of any act of Congress heretofore or hereafter enacted, or any code or regulatory measure adopted by authority thereof, for the regulation or control of the petroleum industry. The successful bidder must deposit on the date of the sale with the officer in charge of the sale a certified check on a solvent bank, or cash, for one-fifth of the amount bid by him and file the showing of qualifications to receive a lease required by section 15 of the said regulations. Bidders are warned against violations of the provisions of section 59 U. S. Criminal Code, approved March 4, 1909, prohibiting unlawful combination or intimidation of bidders. The right is reserved to reject any and all bids in the discretion of the Secretary of the Interior. (Signed) Paul A. Rosch, Register.

COLORADO

Moffat County

Stanolind Oil & Gas Co.'s No. 22-SD Shaw, NW SE NW Section 27-4n-92, in the Iles Field, is a near completion. It topped the Sundance at 3,386 feet, cored to 3,390 feet and cemented the 6¼-inch at 3,385 feet. Cores showed good saturation and a large well is expected. It is near the top of the structure. The elevation is 6,409 feet. The top of the Morrison was at 3,175 feet.

Archuleta County

It probably will be a week or more before the value of the oil discovery on the Price structure in Archuleta County in Oil City Petroleum Co.'s No. 1-A Garnett, Lot 3, SW Section 25-33-2e, is known. A carload of equipment and tanks was shipped last week and storage will be erected and hole cased before the well is drilled in. At last reports the oil stood 400 feet in the hole at 970 feet, total depth.

Fremont County

Waterville Oil Co.'s No. 1 State, SE cor. NW Section 16-18-69, Phantom Canon district, a test to the Pennsylvanian, which attracted some attention last spring when it had a show of oil at 2,780 feet, was abandoned at 2,800 feet as uncommercial.

Adams County

Riddle Petroleum Co.'s No. 1 Baxter, C SW Section 2-3s-66, Derby district, is hooking up pumps with water well and will produce with gas lift. A second water well is being drilled and rig is up waiting for rotary tools for a 9,000-foot test.

Park County

South Park Oil Co.'s No. 1 State, SE cor. SW Section 16-11-75, Hartsel district, is drilling at 752 feet in sandy shale.

Prowers County

Trojan Oil & Gas Co.'s No. 1 Lotus Oil, NW NE NE Section 15-23-46, Lamar district, is drilling at 4,520 feet in black shale.

The Continental Oil Co.'s seismograph crew has completed its work northeast of Lamar and moved into Kansas on January 1.

WYOMING

Hot Springs County

California Exploration Co.'s No. 1 Government, NE SE NE Section 12-44-97, on the Waugh structure, which opens a new black oil pool in the Big Horn Basin, is shut down at 3,807 feet until spring and no test of production will be made at this time. Estimates as to what the well will make vary considerably, some putting it at around 400 bbls. a day while representatives of the company express the opinion it will produce 750 to 1,000 bbls. initial. The oil rose 3,400 feet in the hole and slopped over while casing was being run. There is not a heavy gas pressure and the well will have to be pumped at the present depth. It topped the Embar at 3,740 feet and found the first oil at 3,776 feet, saturation continuing to bottom. The top of the Chugwater was at 2,335 feet (cor.) and first red shale at 2,350 feet.

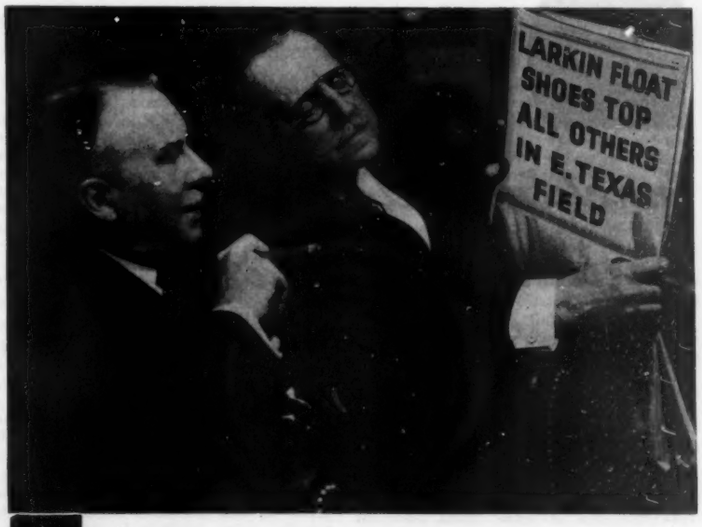
Big Horn County

Jerome Drumheller's No. 1 Martin, SW SE NE Section 17-49-91, Manderson structure, which had 40 feet of oil from the Torchlight sand at 1,329-41 feet, made 1 bbl. a day.

Peter Evanoff and others' No. 1 Griffin, Lot 60, Section 4-55-97, Garland Dome, tested dry at 1,665 feet. The rig probably will be skidded and another hole drilled. It had a show of gas, estimated at 10,000,000 feet a day, at this depth in the Frontier, but this came from a pocket and soon was exhausted. Ohio Oil Co.'s No. 1 Hoskins, SW cor. Section 14-56-97, Byron Dome, is drilling at 3,992 feet.

Carbon County

Argo Oil Co.'s No. 1 Johnson-Union Pacific, NE cor. SE Section 5-24-87,



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LARKIN PACKER COMPANY, ST. LOUIS

LARKIN PACKER CO.

O'Brien Springs district, generally expected to be completed as a producer and open a new light oil field, began drilling out plug today after cementing the 9⅝-inch on top of the Dakota at 3,059 feet and changing over to cable tools. It cored to 3,072 feet before standardizing and found 13 feet of saturation.

Ohio Oil Co. and California Co.'s No. 1 Kyle, NE SE NE Section 26-21-79, Medicine Bow district, is drilling at 2,454 feet, and Ohio Oil Co.'s No. 1 Morris, C NW SE Section 6-20-77, Dinmond Dome, is drilling at 5,260 feet in shale. Earl W. Reeder, Inc.'s No. 1 Union Pacific, C SW SW Section 19-20-83, Overland Dome, is bottomed at 5,930 feet and pulling 4¾-inch which parted at 4,000 feet, and its No. 1 Whitford, SW SE SE Section 24-20-84, is drilling at 1,600 feet.

Sweetwater County

Vermillion Oil Co.'s No. 1 State, SW cor. Section 16-12-99, northeast flank of the Hiawatha structure, is underreaming the 6¼-inch to bottom at 5,400 feet.

MONTANA

The only active operations in Montana the past week were in the Cut Bank Field in Glacier County where two completions and one new location were reported. Most of the drilling wells are shut down and no marked increase in operations is expected until spring.

Indian Oil Co.'s No. 1 Reikhoff, Lot 10, SW SE Section 3-34-6w, on the northwestern side, was completed at 2,950 feet from sand at 2,905-10 feet. Oil rose 300 to 400 feet in the hole, but operations were suspended on account of the weather before a test could be made.

The other completion was Montana Power Gas Co.'s No. 1 State, C SW Section 16-33-5w, in the southeastern part of the field. It was drilled to 2,935 feet and oil rose 800 feet in the hole from sand at 2,915-28 feet. After standing four days oil rose 2,200 feet. It has not been tested.

The new location is Bruce Radigan's No. 1 Connolly, NE SW NW Section 7-33-5w, on the eastern edge of the town of Cut Bank.

A. B. Cobb's No. 4 Walberger, SE cor. Section 35-35-6w, is bottomed at 2,757 feet and cleaning out at 2,500 feet. The 8¼-inch was set at 2,470 feet and the hole has 800 feet of water from the Moulton sand at 2,650-56 feet.

Consolidated Gas Co.'s No. 3 Tribal, NE NW NW Section 34-35-6w, spudded to 35 feet and shut down. Same company's No. 4 Tribal, NE SW NE Section 34-35-6w, is shut down at 595 feet. Fist and others' No. 1 Donen, Lot 10, Block 11, Section 12-33-6w, is rigging up, and Lawler & Hoer's No. 1 Clarkson, C SW SW Section 9-33-5w, is drilling in at 2,860 feet with 200 feet of fluid in the hole. Marshall and others No. 1 Wilkins, NE SE NE Section 12-33-6w, cemented 10-inch on bottom at 585 feet with 50 sacks, and Watson and others' No. 1 Miller, NW NW NE Section 1-33-6w, is drilling at 1,000 feet.

UTAH

Ramsey Petroleum Co.'s No. 1 Senior, SW NE SW Section 13-26-7e, Last Chance structure, Emery County, is shut down at 3,168 feet. It will plug back to 2,760 feet and complete as a gas well. It gauged 21,000,000 feet at 2,724-55 feet.

Standard Oil New Jersey Explains Its Credit Plan

A practical plan of plant or company credit service for employes has been adopted by several of the major operating units of the Standard Oil Co. of New Jersey and is described in the current issue of the Lamp, the company house organ. The article appears in part as follows:

Credit unions have been active in the United States for the last 24 years. Colonial Beacon employes formed theirs in September, 1933, the first to be organized within the oil industry. Today there are six among Standard Oil Co. (N. J.) affiliates—the one at Everett, three at Baton Rouge, one at Bayway and one at Houston, Tex.

The credit union is a mutual organization of industrial employes for providing a systematic savings plan paying attractive dividends, and of making available to its members ready credit for constructive purposes at interest rates lower than they could obtain on the outside. It is purely an employes' organization, with the management having no concern in its formation or running. The credit union has proven to be about the only workable device for handling satisfactorily short term credit problems at reasonable rates of interest. At the same time it affords an exceptionally reliable and fruitful form of investment.

"One reason for the success of the idea is the fact that the employes who manage the credit union are chosen partly for their wide acquaintanceship among their fellows. It has been found from experience that everything else being equal an employe is better qualified to pass on the credit risk of a co-worker than any institution.

Here is the way a credit union works:

"Employes within a company petition for a charter. When this is granted by the state or federal agency, the charter members choose directors, a credit committee and a supervisory committee. A treasurer is elected; usually he manages the organization. Forms, bookkeeping, data and consultation are supplied at cost by the Credit Union National Extension Bureau.

"Shares are $5.00 each, subscribed for at 25 cents per share each payday. If an employe purchases two shares he deposits 50 cents on payday and so on. Dividends on accumulated deposits average about 6 per cent. An employe may withdraw at any time.

"From these funds there is built up the capital out of which loans are made. Such credit is extended only to members of the union; non-members are required to subscribe to a certain amount of stock at the same time, so a man must save while he borrows. Loans are for "provident" purposse only, such as payments for taxes, insurance, repairs, sickness and so on. But loans are also made to enable employes to realize discounts for cash purchases and avoid instalment buying. Small loans of $10, $25 or $50 are made on the character of the borrower without a further endorsement. For larger amounts, if the member has no collateral, a co-maker is usually required. Employes liquidate indebtedness on terms fitted to their earning power and other circumstances.

"Interest charged on such loans amounts to 1 per cent or less per month—assessed against the unpaid balance. The rate is fixed by the members at an annual meeting. The credit union at Everett requires double the deposits necessary to liquidate the loan, so that when the sum is repaid the borrower finds he has saved as much as he borrowed in the first place.

"Earnings and dividends gradually accumulate a reserve fund as insurance against loss from bad loans. The Octane Credit Union sets aside 10 per cent of its yearly gross earnings to this end.

"Sponsors of the credit union point out that in addition to encouraging thrift and helping those in financial difficulties without exorbtant charges, the principle of the credit union has these four advantages:

(a) It meets a credit need which, since banks as a rule have not filled it, has encouraged the spread of "gyp" finance companies.

(b) It helps the employe to learn to manage his own money.

(c) The capital works for those to whom it belongs.

(d) Financial support is put back of the consumption of goods instead of production.

(e) The difference between sound borrowing within one's means is clearly distinguished from blind rushing into debt.

"The blight of the depression, which struck family after family, is indelibly written in the tragic history of the past five years. Employes of Colonial Beacon who were participating in the stock and annuity plans, thought of these resources first when things began to pinch. Many were forced to surrender these to meet emergency expense.

"After discussion at a joint conference and to prevent further sacrifice of stocks, one employee proposed the formation of a credit union. The name, "Octane Credit Union," was selected to dispel any idea that the company was "running" the bank. The directors included a stillman, pipefitter, brickmason, boilermaker, turnover department man, stills operator, stenographer, auditor, clerk, tank wagon salesman and electrician. In a little more than a year the organization grew until today it has more than 200 members, with assets of several thousand dollars. The group has echived its objective in enabling members to retain their stock and annuity payments while working out their immediate credit problems.

"Standard Oil Company of Louisiana employes were next. Early in November three groups were formed among the mechanical employes, process men and main office and lighterage group. Bayway refinery followed shortly after with the Bayway Employes Federal Credit Union. The main office of the Humble Oil and Refinery Co. at Houston was next. The idea has also been considered by the Jersey Standard Club in the New York offices—not that a credit union would be formed by the club itself but because the club has considered using its facilities to call the attention of New York employes to the possibilities of the plan.

SWEET OIL REFINERY FIRE

MUSKEGON, Mich., Jan. 7.—Only quick thought and action saved the new Sweet Oil refinery at Wayne, Mich., which just started operating last month, from complete destruction last week when fire broke out in the tail house. Workers closed the valve shutting off the still, thus confining the blaze to one unit.

Fire started as the result of an explosion in the tail house, in which Edwin Leggett, 33 years old, an employe, was severely burned. He is expected to recover. Damage estimated at $800 will be repaired immediately and operations resumed. The Sweet Oil Refining Co., headed by Max Pray, has been operating the 500-bbl. plant located near the Montcalm County Pool in Central Michigan.

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TECHNICAL QUESTIONS ANSWERED

By Charles K. Francis, Ph. D., Technical Editor

This department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with

marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible.

Inquiries must be signed but only the given initials will be printed. The source of the question is considered to be confidential.

Questions requiring a discussion of patents, the use of intricate formulas, extended computations, or cost estimates cannot be considered.

When the matter is of general interest the reply will be published within a reasonable time.

Preliminary Treatment of Crude Oil on Producing Properties

Is it the common practice to partially refine oil on the producing property before it is sold? What is the composition of oil that requires this treatment? Would there not be less loss of oil if all the purification were done at the refineries?—J. A. K.

Petroleum is composed essentially of a group of different hydrocarbons, many of which are closely related both in physical and chemical characteristics. It is the object of the refiner to separate and purify these to make the products of commercial value. The first step is to make the separation under some condition of heat, pressure being used on a large part and frequently distillation is made under vacuum. The one important operation where the separation is not made at some elevated temperature is in the extraction of wax, this being accomplished through the application of low temperatures to cause solidification of the wax, which is then separated from the oil by mechanical means.

There is an increasing demand for the lower, very volatile, hydrocarbons, especially propane and butane, that have to be condensed under pressure at low temperature. These are extracted from natural gas as by-products when making natural gasoline, usually in plants that are located quite close to the producing properties.

This brief reference to the principles involved in the manufacture of petroleum products suggests that if the crude oil consisted of pure hydrocarbons the entire refining operation would be a physical one, simply controlling heat, but the several impurities that are found in the oil, although never in large percentages, are of such character as to require chemical treatment at almost every stage of the process of manufacture.

The petroleums of the world are so different in their properties that each producing field must be considered alone. Some oils as produced contain excessive quantities of mechanical impurities which have to be removed by chemical treatment in order to bring the oil to the purity required by the purchasers. All oil is not refined immediately after being produced; large quantities are placed in storage. If the impurities were not reduced before the oil enters the pipe lines and being placed in storage, costs of transportation would be excessive and storage facilities would have to be enlarged simply because of the presence of worthless material. The regulations of the major purchasers of crude oil covering the purity of the oil to be purchased are comparable to the specifications adopted by all industries for the control of raw materials.

The common impurities that have to be reduced in many crude oils include water, salts, sand, wax, gums, tars and hydrogen sulphide. The important process required on many leases is one for the separation of water from the oil and the removal of solid material, which in many instances cannot be done with the use of special chemical methods. The most troublesome impurity met with when producing petroleum is the emulsion water in oil. Large volumes of oil are lost each year because of failure to treat such emulsions. However, much oil is recovered through the application of proper methods. Hydrogen sulphide is seldom present in large enough quantities to require preliminary treatment of the crude oil but in some cases this must be done on the producing property.

Production of Motor Fuel From Coal and Oil Mixture

We wish to obtain some information covering the manufacture of motor gasoline, by distilling a mixture of coal and oil. If you have anything about this, the information will be appreciated.—C. W. R.

The use of a fuel consisting of powdered coal and oil, colloidal fuel, was mentioned in this department, issue of October 26, 1933.

Several methods have been proposed for treating coal and oil mixtures under cracking conditions; one of these is reported to be in operation at Cannock, Staffordshire, England.

Experimental work has been in progress during the past four years, and recently a plant was built and operated under commercial conditions. The operators claim that this full-size plant, with two large retorts, indicates a definite solution of the problem of producing oil from coal on a commercial basis.

The process, it is stated, involved a principle entirely different from other systems of low temperature carbonization. It makes use of cheap slack, coal dust and oil. The method consists in reducing coal to a very fine powder and blending this with oil to form a colloidal mixture. This mixture is fed into revolving tubular retorts which are heated to a temperature of about 850° F. Light vapors are given off from the top of the retort and passed to a condenser. This liquid is treated as raw distillate. The products, according to reports, are a light motor fuel, comparable to a high octane gasoline, and a heavier oil which is used again for mixing with the coal dust for further charges to be fed into the retorts. The gas generated is sent back into the plant burners for heating the retorts and the residue in the retorts is disposable as smokeless fuel.

This method is not to be confused with that of Bergius, in which hydrogen is introduced into the chemical structure of the coal compounds to form a liquid. The first hydrogenation experiments of Doctor Bergius were with coal and afterwards the same principles were applied for the hydrogenation of petroleum, making it possible to obtain yields of gasoline equivalent to over 100 per cent of the oil charged.

Burning Coke and Refinery Waste Without Damaging Furnaces

We have a large quantity of refinery waste, consisting of carbon, coke, treating sludges and tank cleanings, which has a high fuel value but when burned under the stills and boilers causes damage to the furnace brick. Is there any way to burn such material so that this damage will be avoided?—A. I. V.

A difficulty frequently met with when utilizing certain materials as fuel is the melting away or slagging off of the furnace walls due to some fluxing substance contained in the fuel. The desirability of avoiding a fuel containing mineral matter that would tend to cause a fusion, or melting away, of the furnace surfaces was early recognized by the industries making use of large quantities of coal. While slate and pyrites cannot be considered as fuel, they are especially objectionable because they contain alumina and iron, both of which cause fusion of furnace brick. Today this factor is covered in the ash specification for industrial coal.

The alkalies, especially soda and lime, are powerful fluxes that are responsible for most of the damage to the furnaces of refineries where residues are burned to save fuel. These combine with the brick to form low melting point materials that flow away to form a slag. The chemical action of these substances is so serious that many refineries do not attempt to utilize residues as fuels, so they are frequently burned or simply dumped in some convenient low spot.

One method for utilizing these wastes as fuel was described in The Oil and Gas Journal, November 17, 1932, page 85, by O. F. Campbell. This method involved the construction of a special furnace for heating boiler. "The boiler furnace construction consists of all four walls water cooled by means of a refractory covered block water wall. The furnaces are of the slag-tapping type, and slag is tapped approximately once every two weeks, depending upon the per cent of ash. . . . The slag is sluiced . . . directly to an ash pit. The ash content consists primarily of caustic, sodium hydroxide. The furnace bottoms are covered with plastic chrome ore to prevent slag penetration. The chrome ore is heavier than the molten ash which allows the molten ash to float and be tapped off."

In the plant described, coke breeze, pulverized coke, unmerchantable fuel oil and surplus refinery gas are burned. The burners are designed to burn the pulverized coke, oil and gas. Two boilers are operated with this fuel, each having an average steam output of 120,000 pounds per hour, capable of being increased to 148,000 pounds per hour, at 170 pounds and 150° F. of superheat.

Traces of Alkali May Cause Gasoline to Become Yellow

We have had some difficulty with our gasoline with respect to color, with no change in crude, which runs always between 36 and 39 gravity, or operating conditions in the refining. The gasoline comes from the treaters on color, but after standing in the tanks for a week or so goes off to around 18 to 20. Can you suggest any reason for this?—B. E. F.

Sometimes oxidation products, including formation of both color and gum, will appear but usually not in so short a period of a week when the gasoline is in dark storage. It may be that in this instance some change has been made in the details of treating and especially with reference to the final washing.

The treatment with acid may produce complex compounds which will unite with sodium to form substances that gradually develop color. Also, the caustic soda, even in very small quantities, is liable to produce yellow to brown colored solutions. A color formed in this way, that is because of traces of alkali, is always traced to the chemical treatment. An untreated distillate will seldom behave in a like manner.

Complete washing of the product with water after the doctor test treatment is absolutely necessary if a high quality product is desired. Some refiners make certain that no trace of alkali will be possible in either gasoline or kerosene by finishing with a very weak acid wash, followed by a final water wash. These two operations replacing the final water wash after doctoring. Solutions of weak acidic salts, as aluminum sulphate, and sodium acid sulphate, have been used for the same purpose.

The quotation following is from Chemical Refining of Petroleum by Kalichevsky and Stagner, page 82:

"The dark color of oil is ascribed to various impurities, mostly of bituminous and asphaltic nature. Highly unsaturated hydrocarbons, as well as nitrogen, oxygen, or sulphur compounds, are sometimes vaguely assigned as causing the colors. The reversion of color of an oil on standing, after once being decolorized, may be due to unstable, resin-forming substances, possibly of the type of indene, coumarin, fulvenes, fluorene, and their homologs, which have a marked tendency to form peroxides, as well as to certain sulphur compounds. There are claims, perhaps poorly founded, that 'white oils' do not exist as such in the original crude but are formed as a result of chemical changes during the acid treatment. Whatever the cause of these color phenomena, it is certain that quite a variety of chemical substances can be responsible.

"The permanency of the color is usually improved by increasing the severity of the treatment. Thus a cracked gasoline treated with a large quantity of acid may have an initial color equal to, but no better than, one treated with a smaller quantity of acid, but on exposure for a few minutes to the sun or on standing in storage for a week or more, the first sample will usually show less change in color than the second."

NATURAL GAS DEVELOPMENTS

Trade Commission Report on Natural Gas Industry

WASHINGTON, D. C., Jan. 7.—The Federal Trade Commission has sent another installment of its report on its utility investigation to the Senate. The figures on natural gas industry production are largely from the reports of the U. S. Bureau of Mines, showing production and value at point of consumption, but do not include considerable quantities used by the producers themselves and large quantities wasted or lost.

The report shows that in the natural gas field, production in 1906 was 388,843,000,000 feet with a value of $46,874,000. By 1932, this production had increased to 1,555,990,000,000 feet with a total value of $384,632,000.

In the manufactured gas industry, production is shown for periods from 1899 to 1931. In 1899, production was 67,093,553,000 feet with a value of $75,716,693. The peak year was 1929 with production of 450,717,416,000 feet with a value of $512,652,595. Production in 1931 diminished to 397,696,693,000 feet with a value of $467,751,449. These figures include both private and municipal establishments, separate figures for municipal gas production not being available in the government report from which the figures are taken. However, privately owned companies owned 94 per cent of the gas establishments in 1931 and produced 98.6 per cent of the value of products. As in the electric industry the number of companies in the manufactured gas industry declined in last years. In 1909, there were 1,296 establishments producing manufactured gas and in 1931 only 638.

In 1918, the net income of all gas companies as reported to the Treasury Department was $22,488,000 and the consolidated net income was $20,430,000. This income was sharply reduced in 1919, net income dropping to $9,691,000 and consolidated net income to $8,421,000. However, it turned upward in 1920 and the net income reached a peak of $96,630,000 in 1927 while the consolidated net income for that year was $93,863,000. For 1931, the net income of gas companies dropped to $57,211,000 while the consolidated net income that year was $28,073,000.

The gross income of the gas industry for 1926 was $600,898,000 and in 1930, the peak year, was $667,716,000.

Western Gas Construction-Koppers Consolidation

The business of the Western Gas Construction Co., of Fort Wayne, Ind., has been consolidated with that of its parent company, the Koppers Construction Co., of Pittsburgh, Pa., and the activities formerly carried on in the name of the Western Gas Construction Co. will hereafter be carried on under the name of the Western Gas Construction division of the Koppers Construction Co.

The company began operations in 1888 as designers and builders of blue gas and manufactured gas plant apparatus, valves and other equipment for the utility and industrial fields. At the time the Koppers interests assumed control of the Western Gas Construction Co. in 1917 the buildings, including the machine shop, plate and structural shop, foundry, pattern shop, offices and other buildings covered an area of 13 acres. The volume of business expanded steadily and in 1926 the company found it necessary to purchase an additional plant site of approximately 30 acres upon which was erected a new machine shop, plate and structural shop and an office building. The modern facilities and equipment of the new plant have enabled the company to materially increase the scope of its activities.

The consolidation, effective as of January 1, 1935, does not involve any change in physical operations or activities, which will continue to be centered in Fort Wayne, Ind.

Trade Commission Plans Inquiry on Natural Gas

WASHINGTON, D. C., Jan. 7.—Plans have been made by the Federal Trade Commission to start next month on a far-reaching investigation of the natural gas companies, which will consume most of this year.

Final hearings on the electrical power groups will be held this month, opening the way for a beginning on the inquiry into the financing and corporate setup of the gas companies, the producing, distributing and holding companies. The commission's investigators have been working several months in compiling information to be presented at the hearings.

The inquiry will not go into the question of rates, except indirectly. The merging of companies, and the salaries paid officials will be presented as having a bearing on rates charged.

E. W. Davis, the newly elected chairman of the commission, is drafting the report and recommendations for legislation for the regulation of the large electric power companies, and those with gas subsidiaries. This report, which will give the results of the commission's six years of investigation, is expected to be ready in 60 days.

President Roosevelt is withholding his recommendations to Congress, particularly for dealing with the utility holding companies, until he receives the commission's report.

The investigation of electric power and gas company financing was authorized in the Walsh resolution six years ago.

Oklahoma Natural Gas Answers Oklahoma City

Directors of the Oklahoma Natural Gas Co. have refused to set a price on their Oklahoma City plant and declared, in a report to the city council, that the company has no assurance that Oklahoma City is willing, or ready, to buy the property, R. W. Hendee, president of the company, said. The report was signed by Mr. Hendee and R. C. Allen, company attorney.

The company, however, set an estimate on the value of its plant serving 41,546 Oklahoma City customers and 2,829 outside the city limits at $6,079,496.16. In addition it was pointed out the company had an investment of more than $7,000,000 in its gathering system extending as far as Chickasha.

WHEELING RATE CUT

The West Virginia service commission has ordered a net reduction of 8 cents per thousand in the charge of the Natural Gas Co. of West Virginia for gas furnished in Wheeling and vicinity. The new rate was fixed at 44 cents, less a discount of 2 cents for prompt payment. The old rate was 52 cents less 2 cents for prompt payment.

CARBON BLACK HEARING

AUSTIN, Tex., Jan. 7.—The Texas Railroad Commission has set for hearing January 14 applications of J. A. Owens of Oklahoma City to operate a carbon black plant and of the Octane Gasoline Co. to operate a casinghead gasoline plant in Gray County.

New York-Pennsylvania Gas Field Developments

COUDERSPORT, Pa., Jan. 7.—Completion of the Electro-Geometer Corp.'s well on the Catherine Currier farm, Allegany Township, at a depth of 5,205 feet, brought 22,500,000 feet of gas. Top of the Oriskany was at 5,200 feet and the sand was penetrated 5 feet. This is the fifth good well in the Ellisburg Pool.

Allegany Gas Co.'s B. L. Langworthy well is making 11,000,000 feet of gas at a total depth of 4,851½ feet. Pay sand was found at 4,942 feet.

George Doty's well of the North Branch Development Co. was abandoned at 5,658 feet.

In the Benedum and Trees well on the Murray estate farm in Allegany Field reports say the drillers found the sand at 3,205 feet with a yield of 150,000 feet of gas. The well has been shut down 2 feet in the sand at 3,207 feet to await a string of casing.

Thirty-eight good producers have been drilled in Potter County with a total open flow of nearly 650,000,000 feet per day. Twelve of the wells made a production of over 20,000,000 feet. The largest well is the G. H. Schrack, in Hebron Township, making 63,000,000 feet. The second largest is the Bayless-Updegraff, Pye well, completed several weeks ago, making 35,000,000 feet. This well is in the Ellisburg Pool.

In Tioga County, Cabot Thomas is shut down at 5,635 feet on the Burroughs farm. Tioga Natural Gas Co. found the Tully lime at 4,865 feet on the First National Bank of Emporium land, but so far has encountered no sand, drilling at 4,980 feet. Same company's No. 2 on the same land is still shut down at 4,970 feet.

In New York State the Empire Gas & Fuel Co. is setting the casing on the Dean estate well at 4,588 feet.

Regulation of Gas Rates Considered by Allred

AUSTIN, Tex., Jan. 8.—A plan for public utility regulation, including the regulation of rates of natural gas, electricity, water, telegraph and telephone service, has been completed at the request of Governor-elect James V. Allred by Dr. R. H. Montgomery, economist of the University of Texas faculty. A bill, embodying the plan, is being studied by Mr. Allred, and, with such changes as the incoming governor may determine, will be laid before the legislature.

The bill would leave untouched all present powers of the Railroad Commission over oil and gas, except to take the gas utilities division into the new appointive utilities commission to be created by the law.

The power of "home rule" cities—those over 5,000—to regulate rates is constitutional and the bill recognizes they cannot be taken away. The bill offers two ways of centralizing this authority: It proposes the people of any city, by vote, may surrender the rate-control power to the State. It provides others may call in the state agency to assist in rate matters. The state agency will have power to go in and value the gas and other utility systems. The bill does not affect municipally-owned plants.

Where the State assists in fixing, or fixes a fair rate, its fact record will be final, an appeal can be taken only to supreme court on law issues. Where cities fix rates, there will remain appeal to the state agency.

The plan provides for limiting fair return to from 4 to 8 per cent, classified as to hazard. It provides the method of fixing valuation of plants at "prudent investment," and bars good will and other intangibles, except the intangibles of money actually invested in preliminary work. It excludes all "going concern value" figures for return.

One of its most important features, not designed to extend municipal ownership, but to provide machinery for it where cities desire to operate their own services, is to set up the "power district" or "gas district" plan, whereby cities in an area, which have their own local distributing plants, or acquire them, can acquire or build a district generating plant, or a common-owned pipe line system to bring gas to the gates of all the cities of the district.

Muskegon-West Michigan Hearing on January 11

MUSKEGON, Mich., Jan. 7.—Hearing on the proposed extension of supplementary natural gas service established between the Muskegon Gas Co. and the West Michigan Consumers Co. December 6 will be held before the Michigan Public Utilities Commission in Lansing Friday, January 11, it was learned by Dean W. Flowers, vice president and general manager of the former company.

West Michigan Consumers Co. has made three requests of the commission: First, for a 30-day extension of the emergency service established December 6 when several large industrial customers of the West Michigan company were forced to shut down for lack of gas from the Muskegon Field; second, for a further extension until May 1 or until the Naph-Sol Refining Co. starts operation of a new cracking unit from which the West Michigan company has contracted to take by-product gas; and, third, for continued maintenance of the connecting link between the two gas systems for the mutual benefit of both concerns in case of emergency.

Muskegon Gas Co. will not oppose the first request for an extension of auxiliary service until February 5, it was stated by Mr. Flowers. No decision has been made by officials of the American Light & Traction Co. subsidiary, however, as to its attitude on the other two requests. It is believed, however, the gas company will oppose the request for extension until May 1 or until the Naph-Sol cracking plant is ready for operations based on the West Michigan's announced intention to install a butane unit at its plant in the Muskegon oil field.

West Michigan Consumers Co. is planning to continue drilling activities deepening additional former Traverse and Dundee oil wells into the Monroe gas sands now most productive in the Muskegon Field. One 75,000-foot lower Traverse gasser is now being completed and two more old wells are to be deepened immediately to the Monroe sands.

CANADIAN GAS PRODUCTION

CHATHAM, Ontario, Jan. 5.—Official figures of the federal department of trade and commerce show that natural gas production from all Canadian fields in October totaled 1,437,584,000 feet against 1,176,365,000 feet in September and 1,649,651,000 feet in October, 1933. In the 10 months ending October, 17,484,337,000 feet of natural gas was produced in Canada; a decline of 3 per cent from the total of 18,026,795,000 feet in the like period of 1933.

Imports of mixed (natural and artificial) gas into Canada in October were 6,572,000 feet worth $3,943, compared with 13,613,000 feet valued at $8,725 in September.

FIELD PROBLEMS FROM READERS

Edited by Thomas F. Smiley

This department is conducted in order that men connected with the drilling, producing and transporting branches of the petroleum industry may obtain aid in solving problems that confront them in their work. Readers are invited to send questions freely. These questions will be placed in the hands of persons capable of answering them authoritatively, and the answers, based on the best available information, will be published.

Each question should give as much detail as possible, especially if it involves depths of sands, types of sands and operations on adjoining or nearby properties. The source of questions will be considered confidential, and only the initials of the sender will be published. Questions involving patented processes, intricate formulas or estimates of cost cannot be answered. If an immediate answer is important, one will be given by mail when the writer requests it.

In this connection, The Oil and Gas Journal will be glad to publish articles from field men who have devised new methods or improved old ones.

Using Compressed Air or Gas for Cleanout Jobs in Deep Wells

Is the method of cleaning out wells with compressed gas, which I understand is used with success in shallow fields, of equal usefulness in deep wells? Is the method a patented one? Can you tell me what the operation is?—T. G. F.

The method of cleaning out wells by use of compressed gas or air is a patented one. It has been used for years in shallow fields, but only within comparatively recent time has it been applied to deep wells. It has been used with satisfactory results in the Oklahoma City deep-well area, where the problem of economical cleanout jobs faced many operators.

High pressure gas is forced into the well through the tubing which has a special jet-bit at the bottom. This mixes the cavings with the oil in the hole and flows it out into the gas separator. Thus the well is continued on production and the gas is returned to the gasoline plant while cleaning out is going on. As the cavings are flowed out the tubing is lowered until the well is cleaned to bottom. As much as 180 feet of cavings have been flowed out within three hours' time. After the tubing has been bottomed flowing is continued until the well is thoroughly cleaned of cavings.

Cleaning out with compressed air or gas is an invention of I. L. Dunn of Tulsa, who first applied it to wells in the Marietta district of Ohio. In 1925 the process was introduced into Oklahoma.

All Concrete Jobs Are Not Alike in the Matter of Durability

I am thinking of doing several concrete jobs during the next year, and I would like to make good jobs of them. I have noticed a big difference in the matter of lasting quality in concrete work in this locality. Some of it seems to be just as good as the day it was put into use, hard as the hardest rock. But in other cases a sort of fine powder forms on the surface as the concrete is subjected to wear. Can you tell me what makes this difference? Is the wrong mixture used? Is it a poor quality of cement? Or what would you say makes some of the concrete wear into powder? After concrete has once hardened can anything happen to it that will make it disintegrate into powder?—L. G. F.

A good concrete job depends upon various conditions. In the first place, if the cement has been kept in a damp place and becomes caked it is unfit for use. But even with perfect cement a poor job can be done through failure to attend to certain details of mixing, curing and selection of materials.

The tendency to form fine powder is probably due to improper curing. Correct curing is of great importance in making concrete impervious to water, capable of withstanding hard usage and unlikely to grind into powder under wear.

Short-lived concrete walks, floors, etc., often have been the result of hurried curing or of doing the work in freezing weather. You seem to have assumed that the process of hardening consumes only the few days during which it is kept protected after being newly laid. As a matter of fact this process continues indefinitely, for years in some cases, so long as any moisture remains in the concrete and temperature conditions are favorable. So long as this drying process keeps on, the concrete keeps adding to its strength.

The hardening process is more rapid, of course, during the early stages, but where concrete has been cured in a moist atmosphere tests have shown it to be increasing in strength five years after it was laid. To obtain the best results concrete should be kept damp for a week or 10 days, if possible, after being placed in ordinary construction work. In some cases the curing period should be even longer.

Tests made at the University of Illinois strikingly revealed the influence of temperature on the quality of concrete. These tests showed that concrete hardened for 28 days at a temperature near freezing had a strength of only 60 per cent of that possessed by concrete hardened in a temperature of 70° F.

Other important elements figure in the making of first-class concrete. If you are interested in details of the subject, it is suggested that you get the helpful literature obtainable for the asking from the Portland Cement Association, which has district offices in the larger cities, including New York, Chicago and San Francisco. You can address the association at any one of these offices.

Wants to Know Cost of Drilling a Well in East Texas Area

I wonder if I could find out from you the "code" cost of drilling a well in the East Texas Field. I mean by that the cost that I believe was fixed as a fair one by a committee appointed under the oil code. I would like to know the per foot cost of the hole if you can give it that way. I would appreciate it if you could tell me how the cost of drilling in East Texas compares with drilling costs in other fields of the state. Are these figures used as a basis by drilling contractors?—D. D. I.

It costs $1.51 per foot to drill wells in the East Texas Pool, according to the findings of the Texas committee on drilling practices functioning under provisions of the oil code. On the basis of $1.51 per foot the average well producing from, roughly, 3,700 feet, would cost $5,587.

In a statement released last summer through J. D. Collett, general chairman of Region No. 4, the cost of drilling in the Government Wells district of Duval County, Texas, was said to be $1.48 per foot while at Greta in Refugio County the cost was said to be $2.73 per foot.

The costs were said by Mr. Collett to be effective from the time of the hearing at Houston on May 23 at which the figures were determined and apply to all subsequent drilling. The code of fair competition for the oil industry, Paragraph (f), Section 8, Article 3, provides for the hearings to determine cost of operation and provides that contractors should obtain cost plus a reasonable profit on their operations.

Why They Built Several Parallel Lines Instead of One Big One

I am wondering what reason is given for the fact that some of the large pipe line systems contain separate lines of pipe of different sizes. It has occurred to me that one reason may be that the capacity of the line first laid was found to be inadequate, but that would look like shortsightedness on the part of the engineers, especially as I understand some of the systems are composed of several parallel lines. Can you tell me just why this thing was done? —S. N. T.

Inadequacy of one pipe line to carry the oil requiring transportation was the reason for laying more than one line, but it is not to be inferred there was shortsightedness on the part of the engineers. On the contrary these parallel lines were built on the advice of the engineers because they knew that the large-diameter lines as constructed in the earlier days of this work were likely to collapse under the operating pressures used, so they laid several parallel lines of small pipe instead of one line of large pipe. William G. Heltzel, general superintendent of the Stanolind Pipe Line Co., provides the following more detailed information in reply to your question:

"Pipe lines are laid often as a system of multiple parallel lines of different diameters. This condition applies particularly to the trunk line systems of the oil pipe line companies, which have been increased in capacity over a period of years by the addition of parallel lines of various diameters. These parallel lines are commonly known in the oil pipe line industry as loops.

"The older pipe lines have in their trunk line systems some 6-inch pipe, but much of it is composed of parallel 8-inch lines on the high-pressure end. The trunk pipe lines built more recently are composed of 10 or 12-inch pipe and in some cases a single 12-inch line rather than a multiple system of 8-inch lines. A single 12-inch line is nearly equivalent to three parallel 8-inch lines. One can easily understand the advantage of having the capacity of the system in the single 12-inch line rather than in the three parallel 8-inch lines.

"The reason for the use of the smaller diameters of pipe in the older pipe line systems was that it was felt safe to operate only the 6 and 8-inch lapwelded pipe at such pressures as 600 to 700 pounds, which is a normal operating pressure of oil pipe line pumping stations. Consequently, 8-inch pipe was usually used on the high-pressure or pumping end of trunk line systems, and the 12-inch pipe was used on the low pressure ends.

"Seamless pipe of higher tensile strength came into use for oil pipe lines about 1926, and electrically welded (longitudinal seams) pipe somewhat later. The use of seamless or electrically welded pipe of higher tensile strength steel and welding for the girth joints brought about the extensive use of the larger diameters at the higher operating pressures."

Why Was It Called That?

SEA

Seas bear a close relationship to the geology of oil, for in ancient seas, now vanished, were laid down layers of sand and marine organisms which in time created some of the underground formations that folded and locked up petroleum deposits for later ages. Ocean bottoms today are receiving similar sedimentary layers carried in by rivers that feed them. Almost imperceptibly these ocean floors are rising, just as those of millions of years ago did. When Dr. William Beebe went down into the ocean near the Bermuda Island, 3,028 feet, more than half a mile, setting a new record, he barely "scratched the surface." The greatest known depth is 35,400 feet off Mindanao Island in the Philippines. The greatest known depth of the Atlantic Ocean is 27,972 feet off Porto Rico not far from where Doctor Beebe made his record dive. The word "sea" appeared as "see" in the Middle English and as "sae" in the Anglo-Saxon. It is found in forms resembling these in languages of various maritime peoples.

PERSONAL PARAGRAPHS

ARTHUR SORY, former oil operator of Tulsa, and now engaged in gold mining near Boulder, Colo., visited Tulsa last week.

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W. R. HOGAN, field superintendent of the McClanahan Oil Company, spent the holidays with relatives and friends in Bowling Green, Ky.

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ARNO BEHNKE, assistant production superintendent of Amerada Petroleum Corporation in Texas, is happy over the birth of a 6-pound 9-ounce daughter.

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GEORGE S. ROLLIN, vice president of the Kansas-Oklahoma-Panhandle district of the Shell Petroleum Corporation, visited the St. Louis, Mo., headquarters of the company last week.

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NELSON Y. RUTH, formerly a member of the field geological staff of Carter Oil Company, has been made Seminole, Okla., district scout, succeeding JAMES N. O'DONNELL, resigned.

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W. GOULD, president of the Shell Eastern Petroleum Products Company, Inc., and other sales officials of the company, have been on a tour of inspection in the southeastern states.

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MR. and MRS. WALTER L. McCLANAHAN, of Mount Pleasant, Mich., spent the holidays in Atlanta, Ga., where they visited Mr. McClanahan's mother. FRANK RAND, of the McClanahan Oil Company's office, accompanied them South.

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C. A. JOHNSON, who has been drilling at St. Gregoire, Quebec, has returned to his home at Reno, Ohio

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CHARLES A. CARNELL, of Pincher Creek, Alberta, has returned home after completing a drilling contract in the Quebec fields.

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E. W. BRUCKS was the principal speaker at the meeting of the Houston Geological Society, discussing the Buckeye Field in Matagorda County, Texas.

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E. H. SALRIN, first vice president, and T. A. HALL, chief engineer for the Tide Water Oil Company at Houston, Tex., has returned from a business trip to New York.

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MISS HAZEL I. HAUGH, R.N., of Toronto, Ontario, sailed recently for Colombia, where she will spend two years as a nurse in the hospital of the Tropical Oil Company.

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DR. J. BENNETT HILL, has recently resigned his position as chief chemist of the Atlantic Refining Company, to become director of development work for the Sun Oil Company.

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N. K. CHANEY, formerly assistant director of research of the National Carbon Company, is now in a similar position on the staff of the United Gas Improvement Company, at Philadelphia, Pa.

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THOMAS MIDGLEY, JR., who is well known to the petroleum industry through his work in connection with the development of Ethyl Gasoline, was recently elected director at large of the American Chemical Society. He is chairman of the board of directors of the society.

W. A. HORTON, chief geologist for the Superior Oil Producing Company at Houston, Tex., has returned from a business trip to California.

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H. F. MOSES, a geologist, has become the Rocky Mountain land man, geologist and scout for the Carter Oil Company, with headquarters at Denver, Colo.

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BEN E. LINDSLY, chairman of the new pools committee of the Petroleum Administrative Board, was a visitor at Bartlesville, Okla., Wichita, Kans., and Santa Fe, N. Mex., last week.

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GEORGE W. BARINEAU, formerly in the production department for the Pure Oil Company at Houston, Tex., has been transferred to the scouting department at Lake Charles, La.

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GEORGE HARRINGTON, sales engineer of the Hewitt Rubber Corporation, of Buffalo, N. Y., has been on a tour of the Mid-Continent oil fields with JOHN F. EATON of the Jarecki Manufacturing Company.

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PAUL E. FITZGERALD, who was transferred from the home offices of Dowell Incorporated, in Midland, Mich., to Shelby, Mont., last June to have charge of his company's operations in the Rocky Mountain area, has been returned to the home offices as research geologist. He was formerly with the Pure Oil Company geological staff in Central Michigan.

HENRY A. MARTEN, of Chicago, former president of the Ozark Oil & Gas Company of St. Louis, Mo., was a visitor in Tulsa during the holidays.

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T. S. MARSHALL has been appointed assistant sales manager of the Shell Eastern Petroleum Products Company, Inc. He was formerly advertising manager of the company.

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H. F. FUNK, production superintendent of the Gulf Coast division for Sinclair Prairie Oil Company, has moved his office from Mont Belvieu, in Chambers County, Texas, to the company's offices at Houston.

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MR. and MRS. A. H. LEDBETTER, of Mount Pleasant, Mich., spent the holidays in Detroit. Mr. Ledbetter is an accountant for the McClanahan Oil Company, large independent producer in Central Michigan fields.

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ARTHUR R. CAMPBELL, of Shreveport, La., on January 1 assumed the position of executive secretary of the Louisiana-Arkansas division of the Mid-Continent Oil and Gas Association, succeeding the late JOSEPH B. ELAM.

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L. J. HAMMER, traveling auditor for the American Light & Traction Company, and former acting manager of the Muskegon Gas Company, returned to Muskegon from San Antonio, Tex., where he has been stationed for several weeks, to spend the holidays with relatives and friends in Michigan.

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JOHN R. SUMAN, vice president of the Humble Oil & Refining Company, Houston, Tex., has returned to Houston, from a visit to the Pacific Coast.

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H. B. SIEBE, manager of the railway and marine sales department for Sinclair Refining Company, at New York, was a business visitor to the company's offices at Houston, Tex.

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EARL CYPERT, formerly located at Ardmore, Okla., with the Magnolia Petroleum Company, has been transferred to Colorado, Tex., to scout the eastern part of the Permian Basin for his company.

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C. J. DEXTER, of Artesia, has been elected president of the New Mexico Oil and Gas Association; VAN S. WELCH, Artesia, vice president; and HARRY LEONARD, Roswell, secretary-treasurer.

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C. J. KELLY has resigned his position as assistant chief chemist to the Anglo-American Oil Company, Ltd., and has been appointed chief chemist to Herbert Green & Company, Ltd., London, England.

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W. S. FARISH, chairman of the board of the Standard Oil Company (New Jersey), New York, spent the holidays in Houston, Tex., his home when he was president of the Humble Oil & Refining Company.

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MERTON HARRIS, one of the recent appointees of the new attorney general of Texas, WILLIAM McCRAW, has been placed in charge of oil violations in East Texas, and has been checking over the situation in the field, with CAPT. E. N. STANLEY, head of the Railroad Commission's forces at Kilgore.

DO YOU REMEMBER?

From The Oil and Gas Journal Files

25 Years Ago

January 8, 1910

The Texas Co. will build a refinery on the 120 acres adjoining its tank farm in West Tulsa. It is expected to have a crude throughput of 7,000 bbls. per day at the start. The company already has refineries in Port Arthur, Dallas and Port Neches, Tex., and has purchased the site for a plant on the Red River south of Shreveport, La.

W. A. (Chauncey Bill) Stuart, former Penn State College football and baseball star, later with the Pirates and the Giants, has sold his rich 80-acre oil lease north of Tulsa to S. W. Parish, of Beaumont, Tex., and turned his attention to his Hamilton Switch properties.

Dave Stewart is rushing the completion of the Oklahoma Pipe Line from Glenn Pool to the Arkansas line so that it will be ready for operation on March 1.

20 Years Ago

January 7, 1915

The Iron Mountain Railroad has discontinued its oil man's train from Coffeyville, Kans., to Wagoner, Okla. The train was known as "the Coal Oil Johnny."

Disquieting rumors are being heard in Tulsa that the White & Sinclair pipe line from the Cushing Field, Oklahoma, to the Gulf Coast, may not be built because of the unfavorable policy of the Interior Department on Oklahoma Indian leases. The department limits Indian lease ownership to 4,800 acres to any one owner.

The Magnolia Petroleum Co. will soon extend its pipe line from Healdton to the Cushing Field, both in Oklahoma, according to rumor. The line runs south to the Magnolia's Fort Worth refinery. The company at present is shipping 70 loaded tank cars a day out of the Cushing Field.

Douglass Vaughan Blocker, of the J. M. Guffey Petroleum Co., and Miss Ethel Carroll Van Hook, of Marshall, Tex., were united in marriage on December 30. They will reside in Wichita Falls, Tex.

10 Years Ago

January 8, 1925

Charles Shumaker, for 25 years associated with pipe lines in the Eastern fields, has retired as president and general manager of the Crescent Pipe Line. L. E. Lockwood will succeed him.

The value of Oklahoma's mineral wealth has advanced from $4,000,000 in 1901, to $410,000,000 in 1922, says Charles N. Gould, director of the Oklahoma Geological Survey.

Fred D. Capen, superintendent of the Texas Co.'s refinery in Casper, Wyo., dies of pneumonia.

E. B. REESER, president of Barnsdall Corporation, has returned to his offices in Tulsa from a business trip to Chicago.

* * *

SENATOR PETER NORBECK, of Redfield, S. Dak., was in Casper, Wyo., last week. Senator Norbeck has oil interests in Wyoming.

* * *

L. B. McCAMMON, vice president of the Marathon Oil Company, has been elected a vice president of the Tulsa Chamber of Commerce.

* * *

FREDERICK G. CLAPP has returned to his New York office after spending a few weeks studying the situation in the Michigan oil fields.

* * *

P. M. MISKELL, manager of refineries for Empire Oil & Refining Company, returned to Tulsa Saturday from a business trip to Chicago, and left for Washington, D. C., on Monday.

* * *

BILL HOERR, Cut Bank, Mont., operator, and MISS RUTH ALLEN of Poplar, Mont., were married on December 1, is has just been learned. They will make their home at Cut Bank.

* * *

M. G. KERR, of the Union Oil Company of California, who entered the employ of the company as a clerk in the crude oil division in 1910, has been elected an assistant comptroller by the board of directors.

* * *

F. R. (COLONEL) HOUSE, formerly representative for the Mid-Continent Supply Company, Fort Worth, Tex., is now associated with the Bridgeport Machine Company, covering the Fort Worth and Dallas territory.

* * *

DR. BRYCE B. REEVE, Whiting, Ind., has been appointed as director of the medical department of the Standard Oil Company (Indiana), to succeed the late DR. FRANK R. MORTON. He is a brother of DR. R. H. REEVE, Standard company physician, in Casper, Wyo.

* * *

WALTER J. PODBIELNIAK, of Chicago, recently visited the American Gas Association Laboratory at Cleveland, Ohio.

* * *

PORT CAPTAIN T. GILROY, Standard Shipping Company, left for the United States after a visit to eastern Venezuela.

* * *

GILBERT H. BLANKENSHIP was in Shreveport, La., for several days last week and expected to return there this week.

* * *

F. M. BANKS has been appointed vice president in charge of sales for the Southern California Gas Company, by A. B. MACBETH, president.

* * *

F. H. SKEHAN, who has been manager of retail sales in the New Jersey division of the Standard Oil Company of New Jersey, has been appointed manager of the Virginia division. He succeeds E. T. LEMON, who has been appointed manager of the New Jersey division.

* * *

HOWARD JOHNSEN, JACK BAKER, DEWEY MEEKS, SETH WAGNON, WILLIAM HINES, JOSEPH MARTIN and LYNN MARSH, drillers, recently arrived in Venezuela from the United States for work in Standard Oil Company of Venezuela's Quiriquire Field.

* * *

F. L. FARNED, superintendent of the Humble Oil & Refining Company's Ingleside refinery, east of Corpus Christi, Tex., has been made superintendent of the company's plant at Baytown. He succeeds F. N. READ, who has been made superintendent of the Ingleside plant.

Rose From Timekeeper to Director

Elected a director of Standard Oil Company (Indiana) December 26, 1934, Harry F. Glair, general manager of the company's manufacturing operations, has reached relatively early in life a high place in the executive management of the oil industry.

HARRY F. GLAIR

Mr. Glair was born in Chicago August 28, 1888. After graduation from Hyde Park High School in 1906 he went to work at the Whiting refinery as a timekeeper. Two years later he was transferred to the Wood River refinery, where he worked as a clerk and draftsman. Taking time off for a course in mechanical engineering at the University of Illinois, he finished in 1912, and returned to the Whiting plant as an engineer.

In January, 1914, Mr. Glair began his career as an executive when he was made assistant superintendent of the paraffin works. Various promotions made him superintendent of the paraffin department in 1920, assistant general superintendent of the Whiting plant in 1921, general superintendent in 1927, and manager in 1929. While in the paraffin department he was responsible for patents covering improvements in the removal of wax from oil as well as novel improvements in the manufacture of candles.

Transferred to Chicago general offices in August, 1931, as assistant general manager of manufacturing, his promotion to general manager followed in January, 1933. Under Dr. Max G. Paulus, vice president in charge of manufacturing, he is operating head of Standard's refineries.

Since the oil code was adopted Mr. Glair has spent much of his time in Washington, D. C., as a member of the labor subcommittee of the Planning and Coordination Committee, in which position his extensive experience in handling men, combined with his unusual capacity for understanding both sides of labor problems, has been of great usefulness. He is also a member of the refinery subcommittee and of the national committee on gasoline inventories.

Mr. Glair enjoys swimming and golfing. He is married and has a daughter. He is a Mason and a Zeta Psi. He resides in Whiting, Ind.

K. C. STEER has returned to eastern Venezuela after a vacation in the United States.

* * *

ORVILLE P. McLEOD, engineer, has returned to Caripito, Venezuela, after spending two months in New York on business.

* * *

ALLEN DANIELS and GLENWOOD CLOW, drillers for the George E. Failing Drilling Unit, recently arrived in eastern Venezuela.

* * *

M. A. ROBINSON, formerly assistant Creek County attorney at Bristow, Okla., is now counsel for the Olson Drilling Company, with headquarters in Tulsa. He moved to Tulsa during the week with his family, including MRS. ROBINSON and three children.

* * *

J. A. HOLMES, head of the petroleum engineering department of the Standard Oil Company of Venezuela, returned to Caripito by airplane after spending several weeks in the United States on business.

* * *

A. R. VAUGHT, H. C. KELLEY, and T. K. PAXTON, drillers, with the Standard Oil Company of Venezuela, recently left for the United States on vacation, after which they will be transferred to Standard Oil Company of Argentina.

* * *

WESLEY BATTEN, Tulsa local manager of United States Rubber Products, Inc., has announced the resignation of R. C. CHENOWETH, salesman of the company who has accepted a position with the Wilson Snyder Pump Company. The vacancy created by the resignation has not yet been filled.

HAROLD ARMSTRONG, Alco Products, Inc., has returned to the United States from South America. He has been visiting in the Mid-Continent and will be in the New York office of the company early in January.

* * *

J. L. (BUD) PARKER, general purchasing engineer of the Gas Service Company, suffered lacerations across the face in a forced airplane landing near Stanley, Kans.

* * *

C. H. RUTHERFORD, production superintendent of the Sinclair-Wyoming Oil Company, has returned from Casper, Wyo., after a vacation of two weeks on the Pacific Coast.

* * *

DAVID G. HAWTHORNE, petroleum engineer, has recently been added to the production department staff of the Amerada Petroleum Corporation, Tulsa, and will act as field engineer traveling in all areas where this company is active.

* * *

CHARLES V. MILLIKAN, chief engineer, production department, Amerada Petroleum Corporation, Tulsa, together with WALTER G. RICKETTS, superintendent of production, Amerada Petroleum Corporation, was in Houston, Tex., and the Gulf Coast area last week.

* * *

WIRT FRANKLIN, president of the Independent Petroleum Association of America, has gone to Washington, D. C., in connection with affairs of the association and of the Planning and Coordination Committee of which he is a member.

* * *

W. H. CORREA, vice president and director of Standard Oil Company of New York and manager of the lubrication department of Socony-Vacuum, accompanied by HERMAN W. TAYLOR, manager of the General Petroleum Corporation's lubrication department on the Pacific Coast, are making a tour of the principal cities in the western states in connection with the sale of lubricants.

* * *

ARCH P. PEW, manager of the Ambridge (Pa.) Gas Company for the past 10 years, has retired. W. E. SCHROEDER succeeds Mr. Pew as manager.

* * *

C. H. McDUFF, head of the Standard Oil Company of Venezuela drilling department, is visiting the Tropical Oil Company's operations in Colombia.

* * *

C. I. DAVENPORT, driller, with Standard Oil Company of Venezuela, has returned to Cumarebo, after a vacation in the United States.

* * *

J. R. GRAMM, of the U. S. War Department, spent several days at the Cleveland, Ohio, laboratory of the American Gas Association, observing tests made on water heaters to be purchased by the Federal Government for various army bases

* * *

J. P. MITCHELL, Tulsa, who has been with the Gypsy or Gulf companies for several years, will leave January 10 for Maracaibo, Venezuela. He is being transferred to the production department of the Gulf Oil Company. He was stationed in Mexico for several years. He will sail from New York January 15. MRS. MITCHELL and daughter, Christine, 14, will join him in South America in the spring.

* * *

RUSSELL B. BROWN, for several years counsel of the Independent Petroleum Association of America, who was drafted as first secretary of the Planning and Coordination Committee under the petroleum code and who has more recently been compliance director of that committee, is returning to the association as its general counsel. He resigned as compliance director, January 1, 1935.

MARKET RECORD OF OIL SECURITIES

Active Oil Stocks Listed on New York Stock Exchange

Compiled by Carl H. Pforzheimer Co., 25 Broad Street, New York City, Members New York Stock Exchange and New York Curb Exchange

High 1935	Low 1935	Sales Week	High ended January 5	Low January 5	Close January 5	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	Dividends paid in 1934	1934 High	1934 Low	1933 High	1933 Low
52¾	50½	2,600	52¾	50½	51	Amerada Corp.	774,875	N.P.	50cQ	1-31-35	$2.00	55⅝	39	47⅝	18½
25⅝	25	7,300	25⅝	25	25⅝	Atlantic Refining	2,673,834	$25	25cQ	12-15-34	1.00	35¼	21½	32½	12⅜
7	6¼	12,100	7	6¼	7	Barnsdall Corp. A	2,248,795	$5	....	5-11-31	....	10	5⅞	11	3
7⅜	7	19,500	7⅝	7	7⅛	Columbia Gas & Elec.	11,610,036	N.P.	....	5-15-34	‡ .25	19¼	6⅝	28⅛	9
8¾	8⅜	22,200	8¾	8⅝	8⅝	Consolidated Oil Corp.	14,218,835	N.P.	14c	10-31-34	.42	14¼	7¼	15¾	5
19⅛	18½	18,300	19⅛	18⅝	19	Continental Oil of Delaware	4,738,593	$5	25c	10-31-34	.50	22¾	15¾	19⅝	4⅞
17¼	16¼	4,100	17¼	15⅞	17¼	General Asphalt	387,149	$10	....	6-15-32	....	23½	12	27	4⅜
3⅜	3⅛	2,900	3⅜	3	3⅛	Houston Oil (new)	1,098,618	$25	....	10-17-30	....	5⅝	2½	7⅜	1⅞
1	1	900	1	¾	1	Louisiana Oil Refining	1,302,158	N.P.	....	.....	....	3⅜	¾	4	⅝
12⅞	12½	2,500	12⅞	12½	12¾	Mid-Continent Petroleum	1,857,912	$10	25c	11-15-34	.50	14¾	9⅛	16	3⅝
14⅝	13¼	1,800	14⅝	12¾	14	National Supply of Delaware	382,591	$25	....	5-15-31	....	21⅛	10	28⅝	4
10⅞	10¼	12,100	10⅞	10¼	10½	Ohio Oil Co.	6,563,107	N.P.	15c	12-15-34	.45	15⅞	8½	17⅝	4¾
8½	8¼	1,100	8½	7⅞	8¼	Pacific Western Oil	1,000,000	N.P.	40c	11-30-34	.40	9⅜	5½	9½	3
⅞	¾	300	⅞	¾	⅞	Panhandle P. & R.	198,770	N.P.	....	.....	....	2½	⅝	4¼	⅜
16	15	16,100	16	15	15⅝	Phillips Petroleum	4,154,687	N.P.	25c	12-1-34	1.00	20¾	13⅜	18¾	4⅜
8⅝	8¼	4,200	8⅝	8¼	8⅝	Plymouth Oil Co.	990,261	$5	4% Stk.	12-22-34	75c & 4% Stk.	16⅜	7¼	17⅝	6¾
7¾	7⅛	18,900	7¾	6⅞	7½	Pure Oil	3,038,370	N.P.	....	9-1-30	....	14⅞	6⅛	15⅜	2½
30¼	29¾	400	30¼	29¾	30¼	Royal Dutch N. Y. shares	432,224	$14	$1.35	7-31-34	1.35	39⅛	28⅝	39¾	17⅜
26⅞	25	6,200	26⅞	24	26	Seaboard Oil of Delaware	1,204,460	N.P.	15cQ§	12-15-34	1.00	38⅜	20¾	43⅜	15
7⅝	6¾	10,100	7⅝	6¾	7⅝	Shell Union Oil	13,070,625	N.P.	....	6-30-30	....	11½	6	11⅝	4
69½	69	1,400	70	69	69¼	Shell Union Oil pfd.	400,000	$100	....	7-1-31	....	89	57	61	28½
18⅝	15⅝	20,600	18⅝	15⅜	18½	Simms Petroleum	461,000	$10	50c	2- 1-35	.55	17⅛	7¼	12⅜	4⅛
7	7	200	7⅛	7	7	Skelly Oil	1,008,514	$25	....	12-15-30	....	11½	6	9⅞	3
14⅞	14⅜	20,200	14⅞	14¼	14⅝	Socony-Vacuum	31,019,694	$25	15cQ	12-15-34	.60	19⅞	12½	17	6
32⅜	31¼	10,500	32½	31¼	31¾	Standard Oil of California	13,102,900	N.P.	25c	12-15-34	1.00	42⅞	26½	45	19½
25½	25	8,800	25½	25	25	Standard Oil (Indiana)	15,941,894	$25	25cQ	12-15-34	1.00	32¾	23¼	34	17
30¼	30¼	100	30¼	30¼	30¼	Standard Oil of Kansas	200,000	$10	50cQ	10-31-34	2.00	41	26	39⅞	12¾
43½	43	17,100	43½	43	43½	Standard Oil of New Jersey	25,740,065	$25	50cSA§	12-15-34	1.25	50⅛	39¼	47½	22¾
..	..	500	69	69	69	Sun Oil	1,733,013	N.P.	25cQ†	12-15-34	$1 & 9% Stk.	74¼	51½	59	35
21½	20½	11,400	21½	20½	21	Texas Corp.	9,486,417	$25	25cQ	1-1-35	1.00	29⅜	19⅝	30⅛	10¾
3⅞	3¼	5,500	3⅞	3¼	3⅞	Texas Pacific Coal & Oil	880,703	$10	....	12-31-29	....	6½	2½	6½	1⅝
10	9⅜	10,000	10	9⅜	9⅜	Tide Water Associated	5,618,672	N.P.	....	2-16-31	....	14⅜	8	11⅜	3¾
87	86	800	87	86	87	Tide Water Associated pfd.	666,524	$100	$2.	12-22-34	‖8.50	87	64½	65¼	23½
16⅜	15¾	3,500	16⅜	15¾	16¼	Union Oil of California	4,386,070	$25	25cQ	11-10-34	1.00	20½	11½	23⅜	8½
26⅛	25¾	3,600	26⅛	25½	25⅞	Union Tank Car	1,200,000	N.P.	30cQ	12-1-34	1.20	25¾	15⅝	22¾	10½
2½	2⅜	1,400	2½	2¼	2⅜	Wilcox Oil & Gas	424,839	$5	....	5-10-28	....	5¾	2	5½	2

*Ex-dividend. †Plus extras in common stock. §Plus extras. ‡Payable in 5 per cent convertible preference stock. ‖On account of accumulated dividends.

Active Oil Stocks Listed on New York Curb

Compiled by Carl H. Pforzheimer Co., 25 Broad Street, New York City, Members New York Stock Exchange and New York Curb Exchange

High 1935	Low 1935	Sales Week	High ended January 5	Low January 5	Close January 5	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	Dividends paid in 1934	1934 High	1934 Low	1933 High	1933 Low
32	32	150	32	31	32	Buckeye Pipe Line Co.	200,000	$50	75cQ	12-15-34	$3.00	38	26	39¾	25
2⅜	2	4,500	2⅜	2	2⅜	Carib Syndicate	579,000	25c	....	.....	....	5½	1½	7¾	⅛
..	..	150	145	142½	145	Chesebrough Mfg. Co.	120,000	$25	$1Q†	12-28-34	11.50	150	116	129	71
1½	⅝	14,200	1½	1⅜	1⅜	Cities Service	37,804,394	N.P.	....	6-1-32	....	4¼	1¼	6¼	1½
⅞	⅞	400	⅞	⅝	⅞	Colon Oil	2,200,000	N.P.	....	.....	....	3¼	½	4	⅛
¾	¾	1,400	¾	⅝	¾	Cosden Oil	399,687	$1	....	.....	....	3⅞	½	3⅞	1⅜
13⅜	13	7,000	13⅜	13	13	Creole Petroleum	6,974,356	$5	....	.....	....	14⅜	9⅝	12	4⅜
..	..	No sales	..	..	..	Darby Petroleum	509,696	$5	25c	1-25-35	.50	7½	4⅛	8	2⅜
1⅛	1⅛	1,621	1¼	¾	1⅛	Derby Oil & Refining	263,162	N.P.	....	.....	....	2¼	1	2¾	⅞
34	34	100	34	34	34	Eureka Pipe Line	•50,000	$100	$1Q	11-1-34	4.00	37	30	41¾	20
60⅞	57⅜	6,300	60⅞	56¼	60½	Gulf Oil Corp.	4,538,101	$25	....	10-1-31	....	76¾	49¾	62	24
48¼	47½	2,800	49¼	47½	48	Humble Oil & Refining (new)	8,923,935	N.P.	25cQ	1-2-35	‖1.25	49½	33¼	105½	40
17⅛	16⅞	10,700	17⅛	16⅞	17	Imperial Oil of Canada	26,857,152	N.P.	25cSA†‡	12-1-34	.92½	17⅞	12⅝	15⅞	6½
4⅛	3¾	650	4⅛	3¾	3¾	Indiana Pipe Line	300,000	$10	15cSA†	11-15-34	.35	6⅞	3⅝	8	3⅜
31⅜	30⅞	9,400	31⅜	30⅞	31¼	International Petroleum	14,247,088	N.P.	56cSA†‡	12-1-34	2.28	33⅜	19⅜	23½	8⅜
5	4⅞	9,400	5	4¾	5	Louisiana Land & Exp.	3,000,000	N.P.	....	.....	....	5	2⅛	2¼	⅛
4⅝	4⅝	100	4⅝	4⅝	4⅝	Lion Oil Refining	270,000	N.P.	....	10-27-30	....	6	3⅜	9½	1¼
5¾	5¼	3,500	5¾	5¼	5½	Lone Star Gas	5,382,723	N.P.	16cQ§	3-31-34	¶ .16	8⅜	4¼	11⅞	4⅜
4⅝	4¼	1,200	4⅝	4¼	4⅝	Mountain Producers	1,682,182	$10	15cQ	1-2-35	.60	5½	4	6½	2½
13	13	1,000	13⅝	13	13	National Fuel Gas	3,810,183	N.P.	25cQ	10-15-34	1.00	18⅛	13⅛	20	10
7½	7¼	300	7½	7¼	7½	National Transit	509,000	$12.50	35cSA	12-15-34	.75	9½	7	10	5½
2½	2⅜	2,700	2½	2⅜	2½	New Bradford Oil	1,445,202	$5	10c	9-15-34	.20	2½	1¾	2¼	⅛
1⅞	1⅝	1,700	1⅞	1¼	1⅞	New Mexico and Arizona	1,000,000	$1	....	.....	....	2¾	1	1⅞	⅛
..	..	No sales	..	..	..	New York Transit	100,000	$5	15cSA	10-15-34	.30	4¾	3	4⅞	..
..	..	No sales	..	..	..	Northern Pipe Line	120,000	$10	25cSA	1-2-35	.50	7	4⅝	6⅛	4⅛
2½	2	5,600	2⅛	2	2	Pantepec Oil	1,608,700	N.P.	....	.....	....	2⅝	⅞	3¾	⅛
..	..	No sales	..	..	..	Ryan Consolidated	296,931	N.P.	....	.....	....	3⅜	⅞	4¼	⅜
6¼	6⅛	1,200	6¼	6	6¼	Salt Creek Producers	1,496,859	$10	20cQ	2- 1-35	.80	7⅞	5½	9¼	3½
23½	23	1,900	23½	23	23½	South Penn Oil	1,200,000	$25	30cQ	12-31-34	1.20	26½	17½	22⅛	11
..	..	No sales	..	..	..	Southern Pipe Line	100,000	$10	15cSA	9-1-34	.25	5½	3½	6	2⅛
50	50	50	50	50	50	Southwest Penna. Pipe Lines	35,000	$50	$1Q	12-31-34	5.00	47	41	43	24½
18⅛	18	5,100	18⅜	18	18⅛	Standard Oil of Kentucky	2,606,983	$10	25cQ†	12-15-34	1.50	18⅜	14⅝	19¼	8⅜
..	..	No sales	..	..	..	Standard Oil of Nebraska	190,822	$25	....	6-20-34	.50	16⅞	8¼	20½	11
14¾	14¼	500	14¾	14	14¾	Standard Oil of Ohio	753,740	$25	....	1-3-33	....	28½	12¼	41	15½
1¼	1⅛	2,600	1¼	1⅛	1⅛	Sunray Oil	1,610,810	$1	....	4-15-31	....	2	1/16	1½	¾
6⅞	6¼	1,900	6⅞	6¼	6⅝	Texon Oil & Land	936,028	N.P.	15cQ†	12-29-34	.90	11	4⅜	13¾	6¼

*Ex-dividend. †Plus extras. ‡Payable in Canadian funds. §Payable in preferred stock. ‖Includes 50 cents on old $25 par value stock. ¶Payable in preferred stock.

Note—In comparing highs and lows for the several years in the two tables, it will be necessary to take into consideration cases where there have been stock split-ups.

Further Improvement in Tank Wagon and Service Station Prices Is Expected

By SPECIAL CORRESPONDENT

CHICAGO, Jan. 7.—Further substantial improvement in tank wagon and service station gasoline prices in the Middle West was felt to be imminent in the oil trade as the week opened, perhaps to the extent of approaching or reaching normal levels in all or most important marketing sections of this general territory. Increasing co-operation and further negotiation work on a comprehensive scale form the basis for this sentiment, which is helping to bolster up tank car quotations.

The tank wagon and service station markets have been strengthening by stages in the face of bad weather and consequent reduction in gallonage. December apparently was a poor consumption month in these parts. Nevertheless, these wagon and retail prices are hanging together, and there is much less pressure against them than in the better consuming weather or last summer and autumn, as was expected. But inventory season is now over and any sustained advance in tank car prices is expected in some quarters to attract more interest and buying from jobbers. The latter should be able to participate more actively in such operations since their home resale prices are now being improved as result of the stabilization work being done.

Differentiate in Products

Low octane gasoline has stiffened fractionally from December lows. However, in this market, some gasoline from the East and from Michigan, as well as from parts of the Mid-Continent, has been seeping into this market at prices which are keeping the general market from advancing very rapidly, in view of low demand. Low octane motor is still below 4 cents, while the middle bracket material has been available considerably below levels which was set by refiners as representing a fairly satisfactory level for starting the first of the year. There is a decided tendency, however, to differentiate between third grade and regular gasoline on the part of both buyers and sellers in the trade. The present trend seems to be to make third-grade gasoline lower in quality and performance and to make middle bracket better. It is anticipated here that something of interest may come out of the forthcoming meeting of Mid-Continent refiners on the subject of possible revision of the octane scale of the various products.

There is comparatively little reaction to, or interest in, the current talk of futures markets in crude and refined petroleum, so far as the trade hereabouts is concerned. Few carlot marketers or jobbers are as yet giving much consideration to the recent announcement of the Commodity Exchange, Inc., in New York or to the fact that the Chicago Board of Trade is investigating the possibilities of a petroleum futures department. Extent of refiners' interest has not been checked. In general, however, the plan of the trade's operations continues about as in the past.

Consider More Problems

The stabilization group, in holding further meetings dealing with the whole field of marketing, has recently taken up the matter of methods of compensation for commission agents. This has been one of the sore spots of the price situation. The group also has been giving much consideration to refiners' relation to jobbers and to dealers, further touchy questions under the present scheme of things. Jobber contracts are being signed up for refiners on a fairly good scale at present, according to present reports.

Kerosene

Fair demand for kerosene, coupled with limited supply, has brought about fractional price improvement. Farm consumption is showing up fairly well. Moreover,

(Continued on Page 78)

Crude Oil Prices

(Continued from Page 25)

Humble Oil & Refining Co. and Texas Co. Effective September 20 in Salt Flat by Shell Petroleum Corp.

Rocky Mountain States

Iles, light (Sept. 29, 1933)	$.96
Iles, heavy (Sept. 29, 1933)	.90
Florence, Colo. (June 17, 1933)	.80
Fort Collins and Wellington, Colo. (June 17)	(See Salt Creek prices)
Big Muddy (Sept. 29, 1933)	1.01
Frannie, light (May 1, 1934)	.70
Frannie, heavy (Sept. 29, 1933)	.62
Salt Creek and LaBarge (Sept. 29, 1933)	
See Stanolind Mid-Continent price schedule	
Grass Creek, light (Sept. 29, 1933)	1.18
Grass Creek, heavy (Sept. 29, 1933)	.62
Elk Basin (Sept. 29, 1933)	1.18
Rock Creek (Sept. 29, 1933)	1.02
Lance Creek (Dec. 16, 1932)	.92
Hudson (June 2, 1931)	.65
Lost Soldier (Sept. 30, 1933)	.88
Hamilton Dome:	
Below 18° (July 1, 1934)	.52
18° and above (July 1, 1934)	.62
Torchlight (Sept. 29, 1933)	1.18
Greybull (Sept. 29, 1933)	1.18
Pondera (Sept. 29, 1933)	1.25
Sunburst (Sept. 29, 1933)	1.35
Cat Creek, Montana	1.07
Hogback (Sept. 29, 1933)	1.11
Lea County, N. Mex. (Sept. 29, 1933)	.75
Maljamar (Sept. 29, 1933)	.70
Artesia-Jackson (Dec. 1, 1933)*	.75

Note—Salt Creek, Torchlight, Elk Basin, Grass Creek, Frannie, Greybull, Hogback and Iles by Stanolind Oil & Gas Co. Elk Basin, Grass Creek light, Big Muddy, Rock Creek and Sunburst by Ohio Oil Co. Lost Soldier posted by Producers & Refiners Corp. Artesia, Jackson and Maljamar posted by Continental Oil Co. Lea County, effective September 29, 1933, by Humble Oil & Refining Co. and other buyers; Fort Collins, Wellington, Orchard, Florence, Big Muddy, Cat Creek, Rattlesnake and Table Mesa by Continental Oil Co. Osage posted by Arro. Hamilton Dome, Wyo., by Stanolind Oil & Gas Co.

*Continental Oil Co.

North Louisiana and Arkansas

Smackover, Ark. (all grades)	$.70
Tullos, Urania, La. (Jan. 13, 1934)	.87
Nevada, Ark. (Sept. 29, 1933)	.50
East El Dorado (Sept. 29, 1933)	.70
Converse, La. (Mar. 17, 1934)	1.03
Elm Grove, La. (Sept. 29, 1933)	.75
Holly, La. (Nov. 17, 1934)	1.03
Pleasant Hill, La. (Mar. 17, 1934)	1.03
Zwolle, La. (Mar. 17, 1934)	1.03
Champagnolle, Ark. (Mar. 17, 1934)	.81
Lisbon, Ark. (Mar. 17, 1934)	1.03
Stephens, Ark. (Sept. 29, 1933)	.70
Urbana, Ark. (Mar. 17, 1934)	.86
Other fields	(See gravity table)

Note—Smackover: Effective September 29, 1933, Texas Co., Magnolia Petroleum Co., Standard of Louisiana, Louisiana Oil Refining Corp., Gulf Refining Co. and Phillips Petroleum Co. East El Dorado posted by Magnolia Petroleum Co. and Gulf Refining Co., Nevada by Standard Oil Co. of Louisiana. Urbana posted by H. L. Hunt, Inc., and Louisiana Oil Refining Co. Converse, Holly, Zwolle and Urbana by Standard Oil Co. of Louisiana; Elm Grove by Simmons Oil & Refining Co.; Pleasant Hill by Standard Oil Co. and Magnolia Petroleum Co. Champagnolle by Standard Oil Co. and Lion Oil & Refining Co.

Eastern States

TIDE WATER PIPE CO.
(Effective Jan. 4, 1935)

Bradford, Pa.	$2.20
Allegany, N. Y.	2.20

SOUTH PENN OIL CO.
(Effective Jan. 4, 1935)

Pennsylvania Grade Oil in National Transit Lines (Bradford Field)	$2.20
Pennsylvania Grade Oil in Southwest Pennsylvania Lines	1.87
Pennsylvania Grade Oil in Eureka Pipe Line lines	1.82
Pennsylvania Grade Oil in Buckeye Pipe Line lines	1.72
Corning Grade Oil in Buckeye Pipe Line Co.'s lines (Oct. 2, 1933)	1.37

PENNZOIL CO.
(Effective Jan. 4, 1935)

Pennsylvania Grade Oil in National Transit Lines:	
Group A (Includes Cochran, Franklin, Hamilton and Doolittle districts.)	$2.12
Group B (Includes Titusville district.)	2.11
Group C (Includes Turkey and Tidioute districts.)	2.10
Group D (Includes Bear Creek and Porkey districts.)	2.09
Group E (Includes Eldeneau, Bull Creek, Rough Run, Carbon, Dipner, Bredin, McJunkin, Jameson, Kennerdell, Emienton, Tiona, Lacey and Kinzua districts. Price depends on length of pipe line haul to plant at Oil City.	2.06

PURE OIL CO.
(Effective Jan. 4, 1935)

Cabin Creek, W. Va.	$1.82
Bradford Hollow, W. Va.	1.82
Kelly Creek, W. Va.	1.77

CREW-LEVICK CO.
(Effective Jan. 4, 1935)

Oil City-Titusville	2.12

Middle Western States

OHIO OIL CO.
(Effective September 29, 1933)

Lima	$1.30
Illinois (Jan. 5, 1934)	1.13
Princeton, Ind. (Jan. 5, 1934)	1.13
Plymouth	Shut in
Western Kentucky (May 26, 1934)	1.08
Midland, Mich. (Sept. 30, 1933)*	1.02
West Branch, Mich.	.86
Oceana, Mich. (Oct. 5, 1933)	.90
Somerset, Ky. (Sept. 30, 1933)	1.23

*Posted by Pure Oil Co. and Simrall Pipe Line Co. Producers Pipe Line Co. pays 5 cents per barrel over Pure Oil Co.'s posted prices. West Branch, Mich., posted by Simrall Pipe Line Co. Somerset, Ky., crude purchased by Ashland Refining Co., Ashland, Ky., and posted price includes premium. Oceana posted by Old Dutch Refining Co. and Naph-Sol Refining Co.

Canada

Ontario (September 9, 1933):	
Petrolia*	$5.10
Oil Springs	2.17
Turner Valley (May 21, 1934):†	
Clear naphtha	$2.55
Discolored naphtha	2.37
Crude oil, 50 gravity	2.19
Crude oil, 45 to 49.9	2.07
Crude oil, 40 to 44.9	1.50

*Imperial Oil, Ltd. †Imperial Oil, Ltd. and Regal Oil & Refining Co.

Mexico

Panuco*	$1.00

*F.o.b. ship, based on November transactions and exclusive of production and export taxes and bar dues.

California Crude Oil Prices

STANDARD OIL CO. OF CALIFORNIA
(Effective September 6, 1933)

For current purchases of crude oil at the well (unless otherwise specified). (All gravities above those quoted take highest price offered in that field.)

Gravity—	Long Beach	Seal Beach, Alamitos Heights	Huntington Beach	Inglewood	Playa del Rey	Olinda, Brea Canyon	Athens-Rosecrans	Torrance	Richfield	Whittier, La Habra	Montebello	Santa Fe Springs	La Habra-Coyote	Midway-Sunset, Elk Hills, Buena Vista Hills	Lost Hills	Coalinga	Coyote
14-14.9	$.65	$.65	$.65	$.65	$.65	$.65	....	$.65	$.65	$.65	$.65	....	$.65	$.57	$.57	$.57	$.65
15-15.9	.65	.65	.69	.69	.66	.69	....	.66	.65	.65	.65	....	.65	....	....	....	.65
16-16.9	.66	.66	.72	.72	.69	.73	....	.69	.67	.68	.65	....	.65	....	....	....	.65
17-17.9	.69	.68	.75	.76	.73	.76	....	.72	.70	.71	.65	....	.68	....	....	....	.68
18-18.9	.72	.68	.78	.80	.76	.79	....	.75	.74	.74	.65	....	.71	.61	.61	.59	.71
19-19.9	.75	.68	.81	.83	.80	.82	....	.78	.78	.78	.65	....	.74	.64	.65	.62	.74
20-20.9	.78	.68	.83	.87	.83	.85	....	.81	.82	.81	.66	....	.78	.67	.69	.65	.78
21-21.9	.81	.72	.86	.90	.87	.88	....	.83	.85	.84	.69	$.72	.81	.70	.73	.68	.81
22-22.9	.84	.76	.89	.94	.90	.92	....	.85	.89	.87	.72	.76	.84	.73	.76	.72	.84
23-23.9	.88	.81	.92	.97	.94	.95	$.83	.89	.92	.90	.76	.79	.87	.77	.79	.75	.87
24-24.9	.91	.85	.95	1.01	.97	.98	.86	.92	.97	.93	.80	.83	.90	.81	.82	.78	.90
25-25.9	.94	.89	.98	....	1.00	1.01	.90	.95	1.00	...	.85	.87	.93	.85	.85	.81	.93
26-26.9	.97	.93	1.01	....	1.04	1.04	.94	.98	1.04	....	.89	.90	.96	.89	.88	....	.96
27-27.9	1.00	.98	1.04	....	....	1.07	.97	....	1.08	....	....	.94	.99	.93	.91	....	.99
28-28.9	1.03	1.02	1.07	....	....	1.10	1.01	....	1.11	....	....	.98	1.02	.97	.94	..	1.02
29-29.9	1.06	1.05	1.09	....	....	....	1.04	....	1.15	....	....	1.01	1.05	1.01	.97	....	1.06
30-30.9	1.09	1.10	1.12	....	....	....	1.08	....	....	....	....	1.05	1.09	1.05	1.00	....	1.09
31-31.9	....	....	....	....	....	....	1.12	....	....	....	....	1.08	1.12	1.09	....	....	1.12
32-32.9	....	....	....	....	....	....	1.15	....	....	....	....	1.12	1.15	1.13	....	....	1.15
33-33.9	....	....	....	....	....	....	....	....	....	....	....	1.16	1.18	1.17	....	....	1.18
34-34.9	....	....	....	....	....	....	....	....	....	....	....	1.19	1.21	....	....	....	1.21
35-35.9	....	....	....	....	....	....	....	....	....	....	....	1.22	....	....	....	....	....
36-36.9	....	....	....	....	....	....	....	....	....	....	....	1.26	....	....	....	....	....
37-37.9	....	....	....	....	....	....	....	....	....	....	....	1.30	....	....	....	....	....
38-38.9	....	....	....	....	....	....	....	....	....	....	....	1.34	....	....	....	....	....

Additional Standard Oil Quotations

Mountain View—Effective July 3, 1934, the following are the pri of the Standard Oil Co. of California for its current purchases of crude oil at the well in the Mountain View Field: 14 to 19.9 degrees, 57 cents; 20-20.9, 58 cents; 21-21.9, 59 cents; 22-22.9, 61 cents; 23-23.9, 63 cents; 24-24.9, 66 cents; 25-25.9, 69 cents; 26-26.9, 72 cents; 27-27.9, 75 cents; 28-28.9, 78 cents; 29-29.9, 81 cents; 30-30.9, 84 cents; 31-31.9, 87 cents; 32-32.9, 90 cents; 33 degrees and above, 93 cents.

Elwood Terrace—F.o.b. ship, 33 degrees, $1.03; 34 degrees, $1.06; 35-35.9, $1.09; 36-36.9, $1.12; 37 degrees and over, $1.15.

Newhall—14 degrees and over, 57 cents.

McKittrick and Kern River—14 degrees and over, 57 cents.

Wheeler Ridge—14 to 17.9 degrees, 57 cents; 18-18.9, 58 cents; 19 19.9, 61 cents; 20-20.9, 64 cents; 21-21.9, 67 cents; 22-22.9, 70 cents; 23-23.9, 73 cents; 24-24.9, 76 cents; 25 degrees and over, 79 cents.

Kettleman Hills—33-33.9 degrees, 93 cents; 34-34.9, 96 cents; 35- 5.9, 99 cents; 36-36.9, $1.02; 37-37.9 $1.05; 38-38.9, $1.08; 39 degrees and over, $1.11.

The Texas Co. posted in Shiells Canyon, South Mountain and Santa Paula as follows: 14 to 17.9, 57 cents; 3 cents added for each degree up to and including 26-26.9 degrees at 84 cents; then 4 cen added for each degree up to and including 30 degrees and over at $1. Company posts Standard Oil Co.'s Montebello prices in Montebello and North Whittier, and posts Standard Oil Co. prices in Signal Hill, Alamitos Heights, Huntington Beach, Torrance, Richfield and Santa Fe Springs, all effective September 6.

General Petroleum Co. posts Standard Oil Co. prices in Athens, Rosecrans and Signal Hill; Alamitos Heights up to 26-26.9; Santa Fe Springs up to 25-25.9; Richfield up to 25-25.9; Brea Canyon an Olinda up to 25-25.9, and Torrance up to 25-25.9.

Union Oil Co., effective September 6, posts same price as Standard Oil Co. in all fields in which both purchase, excepting that in Athens-Rosecrans, Union Oil Co. posts 21-21.9, 72 cents, and 33-33.9, $1.15; 34-34.9, $1.21, and 35-35.9, $1.24.

Associated Oil Co., effective September 6, posted same prices for the same grades as Standard Oil Co. of California, excepting that in some fields its gravity scale stops as follows: Huntington Beach, 26 degrees and over; Seal Beach and Alamitos Heights, 26 degrees and over; Coyote Hills, 23 degrees and over; Richfield, 25 degrees and over; Torrance, 25 degrees and over; Inglewood, 24 degrees and over; Santa Fe Springs, 25 degrees and over; Midway-Sunset, Elk Hills, Buena Vista Hills, 30 degrees and over. Also Associated pays 52 cents for oil of 11 to 13.9 gravity in McKittrick, Kern River, Midway-Sunset, Elk Hills, Buena Vista Hills and Coalinga.

Kansas Wildcats

(Continued from Page 55)

L. W. Prunty et al's No. 1 Davis, NE cor. Sec. 6-32-1w.
Rig.

Roth-Faurot et al's No. 1 Bestwater, SE SW SE Sec. 23-30-1w.
Drlg. 2,255 ft.

Stafford et al's No. 1 Krehbiel, NW NW SE Sec. 27-21-3w; (O.W.D.D.).
C.O. at 2,080 ft.

NESS COUNTY

Texas Co. and Gypsy Oil Co.'s No. 1 Goodman, C SW SW Sec. 21-19-23w.
8-in. 4,058 ft.; T.D. 4,061 ft.; R.U. standard tools.

OSAGE COUNTY

Jim Edwards' No. 1 Detrich, C NW SE Sec. 21-14-15.
Spudded and S.D.

OSBORNE COUNTY

Carmen & Hershey's No. 1 Fritz, C NE NE Sec. 9-10-14w.
Dry and abd. 3,879 ft.

PRATT COUNTY

Atlantic Oil Prod. Co.'s No. 1 Prentice, C SE NW Sec. 18-28-14w.
Rigged up.

RENO COUNTY

Foraker et al's No. 1 Hiett, SE SW NE Sec. 34-24-4w.
T.D. 1,285 ft.; S.D.

Kessler, Their and Skelly's No. 1 Bigger, NE SE SW Sec. 29-23-6w.
Rigging up.

Privett Drlg. Co.'s No. 1 Crotts, NE NW NE Sec. 27-26-10w.
8-in. 3,212 ft.; drlg. 3,227 ft.

RICE COUNTY

Allison & Fitzwilliams et al's No. 1 Stumps, NW NW SW Sec. 4-18-10w.
Rig.

Foraker, Nickerson et al's No. 1 Lyons, SE NW Sec. 27-20-8w.
S.D. 1,060 ft.

Gypsy Oil Co.'s No. 1 Dotson, SW SW NW Sec. 25-20-10w.
T.D. 3,304 ft.; P.B. to 2,535 ft.

Johnson & Carey et al's No. 1 Dyck, SE NE SE Sec. 35-22-5w.
Drlg. 2,160 ft.

Lario O. & G. Co. and Reserve Pet. Co.'s No. 1 Shepherd, SW SW NW Sec. 13-22-5w.
6-in. 3,720 ft.; drlg. 3,735 ft.

Lario O. & G. Co. et al's No. 1 Schreg, NW SE SW Sec. 22-19-4w.
K.C. lime 2,565-2,635 ft.; H.F.W.; U.R. 8-in. to 2,655 ft.

Stark & Weil's No. 1 Smith, NW cor. Sec. 30-19-8w.
Location.

Langston et al's No. 1 Markle, NE SW Sec. 1-20-9w.
Show of oil 2,890-2,906 ft.; S.D.

Yingling et al's No. 1 Maupin, NW SW SW Sec. 1-18-8w.
Viola 3,233-39 ft.; pumped 104 bbls. oil, 2 bbls. wtr. in 24 hrs.

ROOKS COUNTY

Stearns & Streeter's No. 1 Meyers, NE NW NW Sec. 34-9-16w.
Drlg. 2,805 ft.

RUSH COUNTY

Flynn et al's No. 1 Hartman, SW SE NW Sec. 4-18-16w.
Location.

Lario O. & G. Co. and Phillips Pet. Co.'s No. 1 Benbow, NW NE NE Sec. 12-17-19w.
Drlg. 3,240 ft.

RUSSELL COUNTY

J. Brousk and R. D. Bailey's No. 1 Kluesner, NW SE Sec. 34-15-12w.
Rig.

Blair et al's No. 1 Fink, SW NW SE Sec. 16-14-14w.
Rigging up.

Eldorado Ref. Co.'s No. 1 Wals, SE NE NW Sec. 29-13-11w.
Drlg. 1,285 ft.

Darby Pet. Co.'s No. 1 Jarus, NW SW NE Sec. 16-16-12w.
Siliceous 3,343 ft.; T.D.; pumped 486 bbls. in 18 hrs.

Hartman & Blair's No. 1 Krause, NE NW NW Sec. 5-15-15w.
Rig.

Hartman & Blair's No. 1 Sullivan, NE NE SE Sec. 2-14-15w.
Rig.

Hartman & Blair's No. 1 Gurney, SE SE NW Sec. 23-14-14w.
12-in. 475 ft.; drlg. 720 ft.

Lario O. & G. Co. et al's No. 1 Nuss, NW SW SW Sec. 11-16-14w.
Location.

Lario O. & G. Co. et al's No. 1 Moore, 760 ft. S and 660 ft. E, NW cor. Sec. 34-13-12w.
Rigged up.

Tom Palmer et al's No. 1 Herbel, NW SW Sec. 4-12-11w.
H.F.W. 3,820-26 ft.; abd.

Wolf Creek Oil Co.'s No. 1 Donovan, SW SW SE Sec. 10-15-15w.
12-in. 879 ft.; U.R. 8-in. csg.

Wolf Creek Oil Co.'s No. 1 Kraft, SW cor. Sec. 26-16-11w.
Rig on ground.

Wolf Creek Oil Co. et al's No. 1 Penn Mutual, SW cor. Sec. 22-15-15w.
Rig.

SALINE COUNTY

Dieter et al's No. 1 Herrington, NE NW SE Sec. 3-13-1w.
T.D. 2,042 ft.; U.R. 8-in. csg.

SCOTT COUNTY

Atlantic Oil Prod. Co.'s No. 1 Vanimen, C SE NE Sec. 15-20-32w.
6-in. liner 4,630 ft.; pay 4,670-86 ft.; swabbed 2½ bbls. oil per day; acidized.

SEDGWICK COUNTY

Aladdin Pet. Co. et al's No. 1 D. Lauck, SE NE NW Sec. 21-28-2.
Rig.

Allison & Fitzwilliams et al's No. 1 Struthers, NE SW Sec. 34-28-3w.
H.F.W. 3,176-87 ft.; T.D. 3,213 ft.; U.R. 8-in. csg.

Cameron, Derby Oil Co. and Trees' No. 1 Brainard, SW SE NW Sec. 19-24-2.
Spudded and S.D.

Syndicate O. & G. Co. et al's No. 1 Ratcliff, NE NW NW Sec. 30-26-2.
Viola 3,372-80 ft.; hole full of wtr.

STAFFORD COUNTY

Atlantic Oil Prod. Co.'s No. 1 Hohner, NW SE SE NE Sec. 21-23-14w.
Rigged up.

Atlantic Oil Prod. Co. and Phillips Pet. Co.'s No. 1 Guthrie, C NW NW Sec. 16-25-11w.
10-in. 2,050 ft.; T.D. 2,203 ft.; fishing.

SUMNER COUNTY

T. Palmer's No. 1 Wentworth, NW NW NE Sec. 9-35-2.
Drlg. 1,600 ft.

TREGO COUNTY

Central Commercial's No. 1 Wagg, NW NW SE Sec. 17-13-21w.
Rig.

Marathon Oil Co.'s No. 1 Kline, SW SE Sec. 19-14-24w.
Dry and abd. 5,339 ft.

Gulf Coast Wildcats

(Continued from Page 50)

ft. W of No. 16.
S.D. 173 ft.

Sun Oil Co.'s No. 22 J. Wilburn, midway between wells No. 17 and 21, or 150 ft. from each well.
Swabbing 4,074 ft.

Texas Gulf Prod. Co.'s No. 3 T. S. Fitzgerald, 340 ft. S of N line and 60 ft. E of W line of lease.
Drlg. salt 1,589 ft.

Texas Gulf Prod. Co.'s No. 2 Morgan Fitzgerald, 400 ft. N of S line, C of Strip No. 3.
Drlg. salt 2,640 ft.

Texas Co.'s No. 10 Wilburn, 475.8 ft. N, 39 deg., 10 ft. W from SW cor. of lease.
Drlg. salt 1,659 ft.

Texas Gulf Prod. Co.'s No. 3 O. W. Winfree, 505 ft. S of N line and 50 ft. W.
Drlg. hard sand 6,262 ft.

Yount Lee Oil Co.'s No. 8 Woodward.
Drlg. shale 6,371 ft.

Yount Lee Oil Co.'s No. 27 Chambers Co., 400 ft. W of No. 24 and in line with Nos. 24 and 21.
Drlg. salt 2,322 ft.

Yount Lee Oil Co.'s No. 28 Chambers County, 50 ft. N of S line, direct offset to Sun's No. 10 Chambers County, Wm. Bloodgood Sur.
Derrick.

BOLING—FORT BEND COUNTY

Allied Minerals, Inc.'s No. 1 J. H. Blackwell, 1,400 ft. from E line, 100 ft. from S line of 50-ac. of J. H. Blackwell 100 ac., John Huff Sur.
S.D. for rig repairs 4,495 ft.

Midland Oil Co.'s No. 1 P. F. Coulter, 150 ft. from S line, 4,174 ft. from W line of 100-ac. tract, Miller League No. 2.
Set screen; T.D. 4,186 ft.

Allied Minerals, Inc.'s No. 1 E. C. Farmer, James Scott League, 750 ft. SE of NW line and 150 ft. SW of NE line of Gulf Prod. Co.'s E. C. Farmer 50-ac. tract.
T.D. 5,543 ft.; waiting on pipe.

Irwin Larsen et al's No. 1 J. R. Farmer, 100 ft. NW and 100 ft. SW from E cor. of 125-ac. lease, James Scott Sur.
Location.

Trans-State Oil Co.'s No. 1 Dipple, E flank of dome.
10-in. csg. at 592 ft.

THOMPSON COUNTY

Gulf Prod. Co.'s No. 10 Gubels.
Rig up.

Humble O. & R. Co.'s No. 22-A Booth.
Drlg. shale 4,363 ft.

Humble O. & R. Co.'s No. 10 Gubbels.
Set 7-in. csg. 5,303 ft.; T.D. 5,363 ft.

Naylor Oil Co.'s No. 6 Gehr, 340 ft. from S line, 460 ft. from E line of No. 4 Gehr, S. Kennedy Sur.
Drlg. shale 1,685 ft.

Naylor Oil Co.'s No. 7 Gehr, 2,020 ft. from E line, 340 ft. from S line, S. Kennedy Sur.
Drlg. shale 2,202 ft.

ORCHARD—FORT BEND COUNTY

Gulf Prod. Co.'s No. 41 Moore, 3,372 ft. S along W line from NW cor. of James Frazier Sur., and 2,154 ft. at R/A.
Drlg. shale and shell 5,612 ft.

SUGARLAND—FORT BEND COUNTY

Humble O. & R. Co.'s No. 12 Nelson.
Rig up.

HIGH ISLAND—GALVESTON COUNTY

Yount Lee Oil Co.'s No. 42 Cade, N. Fitzsimmons Sur., half way between Nos. 26 and 28 and 150 ft. E at R/A.
T.D. 6,063 ft.; P.B. to 5,605 ft.

Yount Lee Oil Co.'s No. 44 Cade.
10-in. csg. at 1,273 ft.; T.D. 1,275 ft.

Yount Lee Oil Co.'s No. 23 Smith.
Drlg. shale 3,330 ft.

Yount Lee Oil Co.'s No. 2 Stewart.
Drlg. shale 3,920 ft.

DICKINSON—GALVESTON COUNTY

Humble O. & R. Co.'s No. 1 Schoper, C S½ of Blk. 15, or on line between Lots 3 and 4 and center N and S, W. K. Wilson Sur.
Location.

Humble O. & R. Co.'s No. 1 H. O. and W. G. Jones, 750 ft. N of N bank of Bayou and center T and W, J. O. Sherman Sur.
Location.

Humble O. & R. Co.'s No. 1 A. F. Danielson, center of 10-ac. tract, being Lots 6 and 7 of Righter Subd., John Sellers Sur.
13⅜-in. at 1,955 ft.; T.D. 1,966 ft.; W.O.C.

ARRIOLA—HARDIN COUNTY

Houston Oil Co.'s No. 3-X fee, 2,150 ft. S of N line of lease and 150 ft. E of W line of Unit X.
Coring 3,940 ft.

BATSON—HARDIN COUNTY

J. H. Burt et al's No. 1 Jordan, 300 ft. E and 100 ft. S of No. 1, Mary Hooks Sur.
Came in as gas well; est. 50,000,000 ft. of gas; T.D. 4,927 ft.

John Deering's No. 1 Cruse.
Rig up.

SARATOGA—HARDIN COUNTY

Rio Bravo Oil Co.'s No. 9 N. Jordit, 200 ft. due W of No. 9 R. Jordit.
Coring sand and shale 1,288 ft.

SOUR LAKE—HARDIN COUNTY

Arlis Pet. Co.'s No. 1 Harkas and Langham.
Dig pits.

Alpha Pet. Co.'s No. 2-A Wm. Weiss, 100 ft. W of No. 2.
Drlg. Vicksburg shale 5,930 ft.

Sun Oil Co.'s No. 3 Bernard Corp., 150 ft. from N and W lines of Lot 11, H.T.&B. Sur., Sec. 69.
Reaming sand 7,404 ft.

Texas Co.'s No. 315 fee, 200 ft. E at R/A to point midway between Nos. 313 and 313.
T.D. 1,712 ft.; I.P. 57 bbls., swabbing and flowing; T.D. 1,602 ft.

GOOSE CREEK—HARRIS COUNTY

Derring's No. 1 Williams, 180 ft. from SE cor. and 55 ft. NE of Hybush's No. 3, in W. Scott upper league.
Cellar.

Humble O. & R. Co.'s No. 20 Simms-Smith, Scott Lower League, 1,000 ft. E of the most westerly W line, and 300 ft. N of the most northerly S line.
Drlg. shale 6,855 ft.

PIERCE JUNCTION—HARRIS COUNTY

Gulf Prod. Co.'s No. 1 Taylor.
Drlg. sand 4,921 ft.

Rio Bravo Oil Co.'s No. 27-A Settegast, 377 ft. S, 553 ft. W of NE cor. of Settegast "A" tract, James Hamilton Sur.
Drlg. shale 5,395 ft.

Rio Bravo Oil Corp.'s No. 9-A Settegast, 1,575 ft. N line, 350 ft. E line NE cor. "A" lease, J. A. Kopman Sur.
T.D. 5,411 ft.; set screen and swabbing.

MYKAWA—HARRIS COUNTY

Danciger O. & R. Co.'s No. 1 Williams, SW cor. of 29-ac. lease.
7-in. csg. 4,870 ft.; T.D. 4,890 ft.

West Prod. Co.'s No. 1 Lobit, C of Lot 17, Erin Gardens Subd., F. J. Rothas Sur
Drlg. shale 6,610 ft.

TOMBALL—HARRIS COUNTY

Humble O. & R. Co.'s No. 1 Mueller.
Drlg. shale 5,438 ft.

Humble O. & R. Co.'s No. 3-A Martens.
10¾-in. csg. 924 ft.; drlg. shale 2,606 ft.

Humble O. & R. Co.'s No. 1 Melo, 525 ft. S of N line, 584 ft. E of W line of 246 acres, C. N. Pillot Sur.
Location.

Texas Co.'s No. 4 W. B. Scherer, 2,731 ft. W of SE cor. of lease, Joseph House Sur. Comp.; dry gas well; tubing pressure 1,450 lbs.; csg. pressure 2,100 lbs.; T.D. 5,607 ft.

KITTRELL—HOUSTON AND WALKER COUNTIES

Humble O. & R. Co.'s No. 3 Shaw, Charles McEllis Sur.
Abd. 1,990 ft.

Humble O. & R. Co.'s No. 4 Shaw, 990 ft. NW from SE line, 990 ft. SW of NE line of C. McEllis Sur.
Prepare to core deeper; well went dead.

Humble O. & R. Co.'s No. 5 Shaw, 990 ft. N and 330 ft. E of SW cor. of the Shaw 100-ac. tract in Charles McEllis Sur.
Derrick.

W. A. Kells' No. 1 L. W. Huffman, center of Huffman tract, C. McEllis Sur.
Location.

VANDERBILT—JACKSON COUNTY

Imperator Oil Co.'s No. 1 Dutton, S C of Lot No. 11, Blk. 25, 450 ft. S of R.R. and 1,350 ft. W line of townsite, Ray Musquis Sur.
Rigged up and S.D.

Turman Oil Co.'s No. 1 T. H. Miller, 150 ft. each way out of E 50 ac. of Miller 100-ac. tract in Ray Musquis Sur.
Rigging up.

BIG HILL—JEFFERSON COUNTY

Yount Lee Oil Co.'s No. 1-A Pipkin, 2,640 ft. S and 2,050 ft. W of NE cor. of survey.
Drlg. shale 5,620 ft.

FANNETT—JEFFERSON COUNTY

Gulf Prod. Co.'s No. 4 Junker, 150 ft. S of N line, 150 ft. W of E line, Tug Junker 260-ac. tract, Wm. Smith League.
Drlg. gumbo 1,160 ft.

CLEVELAND—LIBERTY COUNTY

Blackgold Pet. Co.'s No. 1 R. D. McDonald, 30 ft. due W of Gulf Prod. Co.'s 6-C Kirby, T. Devers Sur.
10¾-in. csg. at 988 ft.; drlg. shale 3,330 ft.

William J. Colegrove et al's No. 1 State School Land & Dev. Co., 446 ft. from W line and 170 ft. from S line of survey, Clayton Rooper Sur.
Location.

Gulf Prod. Co.'s No. 7 Kirby, 1,100 ft. N of No. 6-C Kirby.
Abd. 5,849 ft.

Gulf Prod. Co.'s No. 8-E Kirby, 933 ft. due E of No. 1 Kirby.
Location.

ESPERSON—LIBERTY COUNTY

General Crude Oil Co.'s No. 15 Moores Bluff, midway between No. 10 and No. 12 Moores Bluff.
Swbng. 2,987 ft.; set csg. at 2,955 ft.

General Crude Oil Co.'s No. 9 Davis, 1,300 ft. each way from S and E lines of lease in D. Kokernut Sur.
W.O.C. 5,372 ft.; set csg. to 5,356 ft.

General Crude Oil Co.'s No. 1 W. D. Kay, Malcolm Duncan Sur., 1,537 ft. along N Drlg. hard shale 5,604 ft.

HANKAMER—LIBERTY COUNTY

Gulf Prod. Co.'s No. 1 Boyette, offset to No. 1 Ezzel.
Drlg. sand and boulders 121 ft.

HULL—LIBERTY COUNTY

Gulf Prod. Co.'s No. 12 W. L. Thomas, L-650 ft. N and 150 ft. E of SE cor. of 300-ac. tract, Jessie Devore Sur.
Drlg. sticky shale 5,758 ft.

G. R. Brown and S. F. Bashara's No. 1 David Hannah, Jesse Devore league, 200 ft. S line, 150 ft. E line, 42-ac. Gulf tract, Derrick.

Sterling O. & G. Co.'s No. 1 Taylor, 186 ft. S of S line of tract, and 5,500 ft. E of E line of 5-ac. tract, J. Devore Sur.
Drlg. shale 3,331 ft.

Texas Co.'s No. 3 Barrow.
Drlg. lime and shale 4,112 ft.

BUCKEYE—MATAGORDA COUNTY

United North & South Dev. Co.'s No. 1 Unit 4, Buckeye farm, J. C. Keller league, 214 ft. N line and 302 ft. E line of lease.
No report.

CONROE—MONTGOMERY COUNTY

Humble O. & R. Co.'s No. 72 South Texas Development Co., 969 ft. W of E line, 700 ft. S of N line, T. C. Howell Sur.
7-in. csg. 5,161 ft.; T.D. 5,181 ft.

Houston Oil Co.'s No. 11 Cartwright, N offset to No. 10 Cartwright.
Location.

SPLENDORA—MONTGOMERY COUNTY

A. A. Franklin, tr.'s No. 1 Cora Neff, 4,000 ft. W of E line and 466 ft. S of N line of Neff 1,000-ac. tract, Walker County School Land Sur.
Drlg. shale and boulders.

Bryce McCandless et al's No. 1 Texas Long Leaf Lbr. Co., 330 ft. from N and E lines of the W½ of Blk. No. 8, Walker County School Land Sur.
Derrick.

ORANGE—ORANGE COUNTY

Trio Oil Co.'s No. 1 D. S. Comier, 60 ft. W of E line and 30 ft. S of N line of 6.83-ac. tract in W. M. Dyson Sur.
S.D. 1,792 ft.

PORT NECHES—ORANGE COUNTY

Port Neches Pet. Corp. et al's No. 1 W. B. Organ, 450 ft. from NE line and 150 ft. from NW line of A. Schramm Sur., S of Port Neches Field.
Rig up.

Texas Co.'s No. 3-B Polk, 200 ft. S, 450 ft. W of SE cor. of Mary E. Hall Sur. No. 1.
Drlg. shale and lime 3,574 ft.

Texas Co.'s No. 10 Kuhn, 200 ft. N, 450 ft. W of SE cor. of Mary E. Hall Sur. No. 1.
9⅝-in. csg. 5,443 ft.; T.D. 5,444 ft.

Texas Co.'s No. 6 Kuhn, 150 ft. E, 150 ft. N of SE cor. of Mary Hall Sur.
7-in. csg. 5,399 ft.; drlg. shale and lime 5,540 ft.

LIVINGSTON—POLK COUNTY

Gem Oil Co.'s No. 1 Watt, 330 ft. N of S line, 330 ft. W of E line of lease, A. Viesca Sur.
Location.

Gem Oil Co.'s No. 6 Davis & Holmes, 661 ft. from W and 662 ft. from N line of survey, A. Viesca Sur.
Location.
Rig up.

T. D. Humphries' No. 1 J. C. Whitforth, Derrick.

Sun Oil Co.'s No. 2 H. J. Pratt, 330 ft. from N and E lines of Pratt 195-acre lease, A. Viesca Sur.
Drlg. plug 4,238 ft.

B. M. York's No. 2 Kingsbury County Holding Corp., Tract 19, A. Viesca Sur., 150 ft. N of No. 1.
Drlg. shale 3,500 ft.

GRETA—REFUGIO COUNTY

Atlantic and Stanolind's No. 7-G O'Brien.
Derrick.

Hewitt & Daugherty's No. 12 Lambert.
Rig up.

Humble O. & R. Co.'s No. 18 O'Connor.
Abd. 3,339 ft.

Humble O. & R. Co.'s No. 17 Heard.
Drlg. shale 3,100 ft.

REFUGIO—REFUGIO COUNTY

Houston Oil Co.'s No. 18 P. H. Rooke, 486 ft. SW of NE line, and 352 ft. W of E line.
Cmtd. surface csg. 1,007 ft.

Houston Oil Co.'s No. 18 W. J. Heard, S offset to United Prod. Co.'s well on N side of river.
Drlg. 5,320 ft.

United Gas Co.'s No. 4 Wilson Heard.
Washing down to 3,394 ft.; set rotary.

United Prod. Co.'s No. 9 Wilson Heard, 2,414 ft. SE along NE property line of Wilson Heard 250-ac. tract, thence at R/A 300 ft. to point of location.
T.D. 4,937 ft.; no gauge; 3/16-in. choke; 650 lbs. csg. pressure 650 lbs. tubing pressure.

United Prod. Co.'s No. 2 Powers (old well).
T.D. 5,410 ft.; P.B. 5,220 ft.

OCLETO CREEK—VICTORIA COUNTY

Rupart Cox's No. 1 Antone Trybil, R. Manchola Sur.
Derrick.

Albert Plummer's No. 1 Zimmer, 330 ft. N and SE lines of lease in Manchola Sur.
S.D. 5,200 ft.

Plummer Oil Co.'s No. 3 Zimmer, 660 ft. NE of No. 2.
Location.

McFADDIN-O'CONNOR DISTRICTS—VICTORIA AND REFUGIO COUNTIES

Texas Co.'s No. 9 McFaddin.
Location.

SAN FELIPE—WALLER COUNTY

Seaport Oil Co.'s No. 1 J. W. Avery, 329 ft. from E line, 330 ft. from N line of NE cor. of 29-ac. tract, John McFarland Sur.
Drlg. plug; T.D. 2,994 ft.

Texas Co.'s No. 1 J. H. Jones, 330 ft. each way from N line and NW lines of lease, Wm. Cooper Sur.
Drlg. shale 2,590 ft.

CLAY CREEK—WASHINGTON COUNTY

Sun Oil Co.'s No. 10 H. R. Clay.
S.D. 316 ft.

Sun Oil Co.'s No. 5 J. W. Hunt.
T.D. 1,825 ft.; I.P. 20 bbls.

LOUISE—WHARTON COUNTY

Pure Oil Co.'s No. 3 Charles T. Kountze, 1,980 ft. SE and 330 ft. SW of N cor. of Morris & Cumming Sur., Sec. 9.
Coring sand and shale 1,219 ft.

Pure Oil Co.'s No. 1 John Macha, 318 ft. from NW line and from SW line of J. Walnut Sur., and 467 ft. from NE line

of 101.53-ac. lease, M.&C. Sur. No. 25. Location.
Pure Oil Co.'s No. 1 G. Wharton Est., 1,497 ft. from SW line and 318 ft. from SE line of F. Walnut Sur., Abst. A-36. Tested oil on D.S. test from 5,147-50 ft.
Pure Oil Co.'s No. 2 Stewart, Morris & Cummings Sur., Sec. 25, 990 ft. out of SW cor. of 160 acres.
T.D. 8,271 ft.; P.B. to 6,372 ft.; waiting on cmt. to set.

BAY ST. ELAINE—TERREBONNE PARISH

Texas Co.'s No. 9 Bay St. Elaine.
Drlg. sandy lime 4,736 ft.

CALLIOU ISLAND—TERREBONNE PARISH

Texas Co.'s No. 15 Calliou Island, Sec. 20-23-23.
Drlg. sandy shale 3,796 ft.
Texas Co.'s No. 17 Calliou Island, Sec. 20-23-23.
Rig up.
Texas Co.'s No. 18 Calliou Island.
Location.

SOUTH LOUISIANA FIELDS
BLACK BAYOU—CAMERON PARISH

Shell Pet. Corp.'s No. 2 State.
Cmtd. surface csg.
Shell Pet. Corp.'s No. 1 A. Watkins, 970 ft. S, 1,990 ft. E of NW cor. of Sec. 17-12s-12w.
Location.
Shell Pet. Corp.'s No. 3 State.
T.D. 6,905 ft.; waiting on drill pipe.

BOSCO—ACADIA AND ST. LANDRY PARISHES

Superior Oil Prod. Co.'s No. 1 E. Comeaux ("A" lease), 330 ft. S, 39 deg. 3 min. E, and 350 ft. S, 30 deg. 21 min. W, of SW cor. N¼ NE Sec. 35-8s-3e.
Drlg. shale 7,162 ft.
Superior Oil Prod. Co.'s No. 3 Comeaux, 1,324 ft. E of NW cor. NE Sec. 34.
S.D. 6,076 ft.
Superior Oil Prod. Co.'s No. 5 Larcade, 1,665 ft. S and 483 ft. E of NW cor. Sec. 35-8s-3e.
Derrick.
Superior Oil Prod. Co.'s No. 1 B. Iseringhauser, 330 ft. S and 2,546 ft. W of SE cor. Sec. 27-8s-3e.
Drlg. shale and lime 5,952 ft.
Superior Oil Prod. Co.'s No. 1 Prejan, 324 ft. N, 330 ft. E of SW cor. NE Sec. 34.
Drlg. shale 5,556 ft.
Superior Oil Prod. Co.'s No. 1 Moise LaVergne, 269.7 ft. W and 98 ft. N of SE cor. of Sec. 28-8s-3e.
Drlg. shale 3,123 ft.
Superior Oil Prod. Co.'s No. 1 Trahan, 1,392 ft. N, 542 ft. W of SE cor. Sec. 27.
Drlg. shale and sand 7,625 ft.
Superior Oil Co.'s No. 1 A. Martinez, 2,510.6 ft. S and 1,057.2 ft. W of NE cor. of Sec. 34-1s-1e.
Drlg. sand and shale 10,002 ft.
Superior Oil Prod. Co.'s No. 1 A. Allemond, 350 ft. S, 20 deg. S, 53 min. W, and 530 ft. N, 88 deg., 58 min. W of NE cor. of 37.13-ac. tract, Sec. 33-8s-3e.
13¾-in. csg. 1,232 ft.
Superior Oil Prod. Co.'s No. 1 M. Kahn, from SE cor. 2,563 N, 20 deg., 53 min. E, and 1,000 ft. N, 89 deg., 23 min. W of Sec. 33-8s-3e.
13¾-in. csg. 1,262 ft.; drlg. shale 3,595 ft.

EDGERLY—CALCASIEU PARISH

Emerson Oil Co.'s No. 1 Paraffine Oil Co., 945 ft. N and 50 ft. E of SW cor. NE NE Sec. 28-9s-11w.
Drlg. sand 3,510 ft.
Union Sulphur Oil Co.'s No. 3 Hunter, 1,-160 ft. N and 320 ft. E of SW cor. SE Sec. 21-9s-11w.
Drlg. sand and shale 3,408 ft.

VINTON—CALCASIEU PARISH

W. S. Green's No. 7 Green.
S.D. 1,856 ft.
Vinton Pet. Co.'s No. 9 Gray.
Prepare to pull screen; T.D. 3,490 ft.
Wilson Broach's No. 9 Wilson.
Pulling screen.

CAMERON MEADOWS—CAMERON PAR.

Burton-Sutton's No. 1 School Land.
Drlg. sand 3,648 ft.
Burton-Sutton Oil Co.'s No. 4 School Land, 2,891 ft. W and 150 ft. N of SE cor. of Sec. 16-4s12w.
Derrick.
Magnolia Pet. Co.'s No. 9 Cameron Meadows, 2,266 ft. N and 526 ft. S of NE cor. Sec. 21-14s-13w.
S.D. 3,499 ft.
Texas Co.'s No. 1 Miami Corp.
Drlg. sandy shale 3,014 ft.

CHOCTAW DOME—IBERVILLE PARISH

Standard Oil Co.'s No. 5 Gay, 2,450 ft. S and 435 ft. E of NW cor. of NE Sec. 32-9s-11e.
Rig up.

DOG LAKE—TERREBONNE PARISH

Texas Co.'s No. 11 State, 150 ft. N and 2,474 ft. W. SE cor. Sec. 31-21s-16e.
Derrick.

GARDEN ISLAND BAY—TERREBONNE PARISH

Texas Co.'s No. 13 State, 3,391 ft. S and 1,-504 ft. W of NE cor. Sec. 107-23-22.
Rig up.
Texas Co.'s No. 14 State, 667 ft. N and 992 ft. E of SW cor. Sec. 37-23-22.
Location.

GUEYDAN—VERMILION PARISH

Pure Oil Co.'s No. 6, Alliance Trust, 667 ft. E, 1,787 ft. S line of lease, Sec. 34-11s-1w.
T.D. 9,379 ft.; P.B. to 5,000 ft.; P.B. from 5,000 ft. to 4,560-86 ft.

HACKBERRY—CAMERON PARISH

Calcasieu Oil Co.'s No. 3 H. C. Hansen, 150 ft. S and 180 ft. E of NW cor. of lease. Sec. 13-12s-10w.
Drlg. shale 5,006 ft.
Gulf Prod. Co.'s No. 16 Irwin, 770 ft. from N line, 800 ft. from W line of SE cor. Sec. 12-13w-10s.
T.D. 6,743 ft.; L.P. 1,000 bbls. through ¾-in. choke.
Sutton Oil Co.'s No. 1 Miller, 329 ft. N and 160 ft. E of SW Sec. 13-12s-10w.
Drlg. sancy shale 3,210 ft.
Texas Co.'s No. 13-B State, 400 ft. N of NE cor. of lease, Sec. 13-12s-10w.
T.D. 6,947 ft.; 7⅝-in. csg. 6,923 ft.
Texas Co.'s No. 14 State, 500 ft. SE of No. 13, Sec. 13-12s-10w.
Location.
Union Sulphur Co.'s No. 3 Hanzen.
Drlg. rock 5,494 ft.
Union Sulphur Co.'s No. 4 Hackberry.
Bldg. derrick.
Yount Lee Oil Co.'s No. 1-A Gulf Land, 2,000 ft. S and 50 ft. E of the NW cor of Sec. 22-12-10.
Rig up.
Yount Lee Oil Co.'s No. 4 Carter, 160 ft. S, 305 ft. W of NE cor. of 30-ac. lease, Sec. 22-12s-10w.
T.D. 3,647 ft.; L.P. 65 bbls. through 9/16-in. choke.
Yount Lee Oil Co.'s No. 12 Gulf Land, 1,625 ft. S and 350 ft. W of NE cor. of NW of Sec. 14-12s-10w.
Drlg. shale 2,510 ft.

NEW IBERIA—IBERIA PARISH

I. Delcambre's No. 1 Viatar, 150 ft. E, 150 ft. S and 150 ft. W of SE cor. of tract, Sec. 41-12s-5e.
Abd. 2,450 ft.
Harrison & Abercrombie's No. 2 Schwing, beginning at E cor. of Sec. 24-12s-5w thence southwesterly along section line 3,054 ft., thence NW at R/A 1,121 ft.
Abd. 4,300 ft.
Texas Co.'s No. 1 Hanzen, NE along NW line of lease 508 ft., thence 150 ft. E at R/A, Sec. 54-12s-7e.
Drlg. shale 2,779 ft.

IOWA—CALCASIEU AND JEFF DAVIS

Magnolia Pet. Co.'s No. 11 Walt, 330 ft. E, 330 ft. N of SW cor. NE SE Sec. 12.
Drlg. broken lime 5,660 ft.
Shell Pet. Corp.'s No. 12 Hyde, 330 ft. W, 330 ft. S of NE cor. NW Sec. 13-9s-7w.
Drlg. plug; T.D. 6,959 ft.
Shell Pet. Corp.'s No. 11 Hyde, 330 ft. E and S of NW cor. NE Sec. 13-9s-7w
T.D. 6,938 ft.; L.P. 952 bbls.; tubing pressure 1,155 lbs.; csg. pressure 1,300 lbs.
Shell Pet. Corp.'s No. 10 Hyde.
T.D. 6,940 ft.; L.P. 800 bbls.
Shell Pet. Corp.'s No. 3 Tuten, 1,159 ft. W and 330 ft. from S of NE cor. SE Sec. 13-9s-6w.
Shell Pet. Corp.'s No. 13 Hyde, 990 ft. S, 330 ft. E of NW cor. NE Sec. 13-9s-7w.
Location.

JENNINGS—ACADIA PARISH

Simon-Tolson and Gardner's No. 1, 1,020 ft. due E and 250 ft. due W of SE cor. Sec. 46-9s-2w.
Drlg. gumbo 1,805 ft.
Yount Lee Oil Co.'s No. 14 Housierre-Latrielle, 260 ft. N of No. 13, Sec. 47-9s-3w.
7-in. csg. 7,383 ft.; T.D. 7,399 ft.; prepare to drill plug.

LAKE BARRE—TERREBONNE PARISH

Texas Co.'s No. 12 L.L.&E.
Drlg. shale and lime 3,219 ft.
Texas Co.'s No. 13 Lake Barre.
Drlg. sandy shale 3,663 ft.
Texas Co.'s No. 29 Lake Barre.
Drlg. anhydrite 3,561 ft.
Texas Co.'s No. 30 Lake Barre.
T.D. 4,073 ft.; P.B. to 3,096 ft.; whipstocking at 2,625 ft.
Texas Co.'s No. 31 Lake Barre.
Location.

LAKE HERMITAGE—PLAQUEMINES PARISH

Humble O. & R. Co.'s No. 2 LaFourche, Basin Levee Dist.
T.D. 4,141 ft.; prepare to abd.

LAKE PELTO—TERREBONNE PARISH

Whitstone O. & G. Co.'s No. 1 Buckley, 300 ft. S and E of NW cor. SW SW Sec. 35-19s-16e.
S.D. 2,390 ft.

LAKE WASHINGTON—PLAQUEMINES PARISH

Humble O. & R. Co.'s No. 23 Cockrell-Moran, 650 ft. N and 21 deg. 30 min. E of No. 2 in Twp. 20s-26e.
Cutting and pulling screen and liner; T.D. 4,327 ft.; well went dead.

LEESVILLE—LAFOURCHE PARISH

Gulf Prod. Co.'s No. 5 Allen.
Rig up.
Gulf Prod. Co.'s No. 10 Bernard, 1,833 ft. E, 958 ft. S of NW cor. Sec. 26-21s-22e.
Derrick.
Gulf Prod. Co.'s No. 2 Community, 50 ft. W and 1,300 ft. E of NW cor. Sec. 26-21s-22e.
Abd. 4,321 ft.
Emerald Pet. Co.'s No. 10 State, west bank, 300 ft. S of well No. 1.
Location.
Emerald Pet. Co.'s No. 11 State, east bank, 227 ft. N of well No. 1.
Location.
Emerald Pet. Co.'s No. 12 State, east bank, 250 ft. S of well No. 1.
Location.
Leesville Oil & Gas Co.'s No. 1 Southern Louisiana Canal Navigation Co., 35 ft. W of Bank of Bayou, 15 ft. N of S bank, Sec. 26-21s-22e.
Drlg. sand 3,780 ft.
Lincoln Oil Co.'s No. 5 State.
Location.
Lincoln Oil Co.'s No. 6 Viser.
Drlg. sand 3,587 ft.
Texas Co.'s No. 28 L.L.&E.
T.D. 4,006 ft.; L.P. 1,026 bbls.; ½-in. choke; comp.
Texas Co.'s No. 31 Leesville.
Drlg. sand; showing oil.
Texas Co.'s No. 23 Leesville.
Rig up.
Texas Co.'s No. 27 Leesville.
Canal completed.
Texas Co.'s No. 30 Leesville, 1,075 ft. S, 310 ft. E, NW cor. Lot 6, Sec. 26-21s-22w.
Location.

LOCKPORT—CALCASIEU PARISH

Magnolia Pet. Co.'s No. 12 Bordages, 946 ft. W and 93 ft. N of SE cor. N¼ NE Sec. 8-10s-19w.
T.D. 6,814 ft.; P.B. 6,540 ft.; drlg. shale 7,139 ft.
Union Sulphur Co.'s No. 1 Moss (W.O.).
Drlg. shale and lime 5,985 ft.

PORT BARRE—ST. LANDRY PARISH

Gulf Prod. Co.'s No. 9 Wilson Cochran, Sec. 26s-22s-1e.
Drlg. sand 3,205 ft.

ROANOKE—JEFFERSON DAVIS PARISH

Humble O. & R. Co.'s No. 2 Kratzer, 440 ft. from W line, 440 ft. from S line of 120-ac. tract, Sec. 11-4w-9s.
Moving in rig.
Humble O. & R. Co.'s No. 1 Clayton, 3,030 ft. S and 440 ft. W, NE cor. Sec. 10-9s-4w.
Rig up.
Humble O. & R. Co.'s No. 1 Taylor, 440 ft. E and 440 ft. S of NW cor. SW Sec. 12-9s-4w.
7-in. 7,796 ft.; T.D. 7,830 ft.; L.P. 1,038 bbls. in 16½ hrs.; tubing pressure 1,325 lbs.; csg. pressure 1,725 lbs.
Humble O. & R. Co.'s No. 1 R. C. Jarnegan, 440 ft. S, 440 ft. E of the NW cor. SE Sec. 12-9s-4w.
Coring shale and lime 9,495 ft.
Humble O. & R. Co.'s No. 2 Devilbiss, 1,399 ft. W, 466 ft. S of NE cor. Sec. 14-9s-4w.
Waiting on cmt. to set at 9,425 ft.
Shell Pet. Corp.'s No. 1 Jarnigan, 330 ft. E, 660 ft. S, NW cor. Sec. 12-9s-4w.
Coring shale 9,612 ft.
Shell Pet. Corp.'s No. 1 Carter, 660 ft. N and 330 ft. W of SE cor. NW Sec. 1-9s-4w.
Coring sand 5,774 ft.
Shell Pet. Corp.'s No. 2 Kratzer, 440 ft. N and 440 ft. E of SW cor. NW Sec. 12-9s-4w.
Drlg. shale 4,175 ft.

SORRENTO—ASCENSION PARISH

Union Sulphur Co.'s No. 26 United Land.
S.D. 5,922 ft.

SULPHUR—CALCASIEU PARISH

Union Sulphur Co.'s No. 2 Noble, E of No. 1.
Drlg. sticky shale and lime 2,951 ft.
Union Sulphur Co.'s No. 790 fee, 939 ft. S and 802 ft. W of C Sec. 29-9s-10w.
Drlg. sand and shale 5,467 ft.
Union Sulphur Co.'s No. 2 Ulrich, 500 ft. N of No. 1.
Drlg. sand and shale 5,992 ft.
Union Sulphur Co.'s No. 2 Kelly, 1,345 ft. S, 198 ft. W of the NE cor. of Sec. 30-9s-10w.
Abd. 5,132 ft.

VINTON—CALCASIEU PARISH

W. S. Green's No. 7 Green.
S.D. 1,836 ft.
Vinton Pet. Co.'s No. 9 Gray.
Prepare to pull screen; T.D. 3,490 ft.
Wilson Broach's No. 9 Wilson.
Pulling screen; T.D. 3,520 ft.

WHITE CASTLE—IBERVILLE PARISH

Shell Pet. Corp.'s No. 1 White Castle Shingle Co., 1,320 ft. W, 100 ft. S from NE cor. of lease.
Cmtd. surface csg.
Shell Pet. Corp.'s No. 9 Wilburn, 300 ft. E of No. 7.
Coring sandy shale 6,464 ft.

MISCELLANEOUS WILDCATS
TEXAS
BRAZORIA COUNTY

Amerada Pet. Corp.'s No. 1 Houston Farm Dev. Co., 1,414 ft. N, 316 ft. W of SE cor. of L. Bachelder Sur.
Surveying hole; T.D. 7,667 ft.
Big Creek Oil Co.'s (C. & R. G. Drlg. Co.) No. 2 Truska, 991 ft. W of No. 1, H.T.&B. Sur., Sec. 7.
S.D. 935 ft.
Holt et al's No. 1 Griffith, J. B. Bailey Sur.
T.D. 4,200 ft.; waiting orders.
Luling O. & G. Co.'s No. 1 Jameson, 600 ft. W of E line, 750 ft. S of N line of N. E. Roberts Sur.
Location.
Showers & Moncrief's No. 1 Hughey, 5,500 ft. NW of discovery well, in center of Lot 18, H.T.&B. Sur., Sec. 29, Abst. 292.
Location.

CALHOUN COUNTY

Continental Oil Co.'s No. 1 American Nat. Realty Co., C of NE of Sec. 6, Blk. C.
Preparing to work over.

CHAMBERS COUNTY

Humble O. & R. Co.'s No. 1 Middleton, 466 ft. each way out of the SW cor. of survey.
13¾-in. csg. at 2,319 ft.; drlg. shale 4,-034 ft.
Sun Oil Co.'s No. 1 Hamilton, 1,400 ft. from N line, 1,400 ft. from W line of survey. T.&N.O. Sur., Sec. 128.
Reaming; T.D. 6,694 ft.

COLORADO COUNTY

Danciger O. & R. Co. and L. E. Hultz's No. 1 C. L. Raver, 990 ft. N and E of SW cor. 477 acres, Sec. 1, B.B.B.&C. Sur.
C.O. hole; T.D. 4,500 ft.

FORT BEND COUNTY

Benedum & Trees' No. 1 Jacob Hensler, Charles D. Sayers Sur.
S.D. 6,500 ft.
W. A. Shafer et al's No. 1 V. B. Bortash, 693 ft. SW of NE line and 1,003 ft. NW of SE line of Sec. 52, H.&T.C. Sur.
S.D. 2,900 ft.

GALVESTON COUNTY

Gillock Pet. Co.'s No. 2 Maco Stewart, 900 ft. N and 150 ft. W of No. 1, Alex Farmer Sur.
T.D. 1,500 ft.; waiting on surface pipe; S.D.
Texana Gulf Oil Corp.'s No. 1 Thomas Shaw (200 acres), 150 ft. NW line, 165 ft. NE line, Lot 66, Sec. 7, Hall & Jones, Galveston Island.
Drlg. shale 4,482 ft.

GRIMES COUNTY

Hubert Holt et al's No. 1 Simon Fuqua, 1,200 ft. N of S line and 400 ft. W of E line of 177-ac. lease and survey, Moses Evans Sur.
S.D. 3,080 ft.
Dr. Marshall et al's No. 1-B Todd, 300 ft. from E line and 175 ft. from N line of 150-ac. tract in extreme NW cor. of county (35 ft. N of No. 1).
S.D. 2,005 ft.
Roan et al's No. 1 S. W. Sealy, 3,474 ft. N of S line and 850 ft. E of W line of survey, B. F. Smith Sur., 2 miles SW of Kellum Springs.
S.D. 2,650 ft.

HARRIS COUNTY

American Liberty Oil Co.'s No. 1 M. M. Graves, 1,403 ft. N of S line and 467 ft. E of W line of J. W. Bryan Sur.
Drlg. shale 5,240 ft.
Cockburn Oil Co.'s No. 1 Brooks, 7,400 ft. SW of NE cor. of Robert and Richard Vinee Sur.
Moving in.
Esco Oil Co.'s No. 1 E. P. Seureau, 3,282 ft. from W line and 2,215 ft. from S line of 350-ac. tract, W. P. Harris Sur., Abst. A-30.
Coring sand 3,280 ft.
Goldston et al's No. 1 Weingarten, 467 ft. out of NE cor. of H.&T.C. Sur., Sec. 39.
10-in. csg. 789 ft.; W.O.C.
T. S. F. Oil Co.'s No. 1 J. B. Hine, Arthur McCormick Sur., Abst. 46.
Drlg. shale 2,470 ft.
C. C. Foster et al's No. 1 H. K. Johnson, 2,000 ft. from S line and C of E and W lines of G.C.&S.F. Sur.
Drilled 25 ft. and S.D.
Means and McGehee, Inc.'s No. 1 Laura Lackner, 9,857 ft. W and 2,803 ft. N, of H. Rinerman Sur.
Location.
W. U. Paul's No. 1 E. M. House, 2,200 ft. N and 1,000 ft. E of NE cor. of E. Benson Sur. in M. Magruder Sur.
Trying to sidetrack 7,320 ft.

JACKSON COUNTY

A. M. Harris' No. 1 Whitley, 800 ft. out of SE cor. of F. G. Keller Sur.
Location.

JEFFERSON COUNTY

Sun Oil Co.'s No. 1 H. Long, 1,500 ft. E line, 990 ft. E line of lease.
Reaming sandy shale 9,045 ft.
Sun Oil Co.'s No. 1 Hebert & Braussard, 6,-890 ft. NW along SW line and 660 ft. NE at right angles to SW line, B. Blackman Sur., Abst. No. 2.
Rig up.

LAVACA COUNTY

L. A. Douglas' No. 1 Matt Pustka, 330 ft. S and W lines of 139-ac. tract in Moses Mitchell Sur.
Set 10-in. csg. 150 ft.
Humble O. & R. Co.'s No. 1 C. S. Wilson, 330 ft. out of SW cor. of Crenshaw Sur.
Drlg. lime 6,564 ft.

LIBERTY COUNTY

R. M. Bruner et al's No. 1 N. Bell, 150 ft. from N line and 150 ft. from W line of Bell's 187-ac. tract, H.&T.B. Sur. No. 4.
Rigging up.
Extension Oil Co.'s No. 1 J. A. Lovett, 280 ft. from E and 600 ft. from S line of lease, P. P. Deevers Sur.
S.D. 3,958 ft.
Liberty-Independent Oil Co.'s No. 1 J. M. Neal, 3,550 varas from E line and 500 varas from N line of Samuel Strong Sur.
Coring sandy shale 3,358 ft.
A. L. Maxwell's No. 1 M. P. Hinchliff, 300 ft. from E line and 1,000 ft. from the N line of survey, H.&T.C. Sur., Sec. 10s.
Derrick.
A. L. Maxwell's No. 1 M. D. Hinchliff, 300 ft. from E line and 1,000 ft. from N line of H.&T.C. Sur. No. 150.
Location.
Thomas et al's No. 1-A Eicke, 660 ft. from W line and 2,350 ft. from S line of tract in Green Sur.
T.D. 5,047 ft.; 5⅝-in. csg. at 5,029 ft.

MADISON COUNTY

Texas-New York et al's No. 1, 3,000 ft. E and 1,750 ft. S of NW cor. of J. H. Pearson Sur.
Bldg. derrick.

MATAGORDA COUNTY

Cockburn Oil Co.'s No. 6 Hawkins, 2,600 ft. from NW line, 1,200 ft. from SW line of McCarthy Sur.
Drlg. shale 2,290 ft.
Dr. Griffith's No. 1 fee, 3,000 ft. from E line and 3,000 ft. from W line of Wm. H. Bell Sur.
Rig up and S.D.
Horace M. Smith, Inc.'s No. 1 Wadsworth ranch, 150 ft. out of S cor. of Lot No. 3, Blk. S, R. Fisher Sur.
Rig up.

MONTGOMERY COUNTY

Reynolds Drlg. Co. et al's No. 1 Mrs. Clara B. Stewart, 330 ft. S and E of most easterly inner cor. of 595-ac. tract, John Corner Sur.
Made D.S. test 4,135-50 ft.; coring ahead.
Walter Keeble's No. 1 Foster, 700 ft. E of W line, 2,000 ft. N of S line, Lot 27.
Moving in rig.
Woodard-Smith-Cooper's No. 1 J. V. Scott, F. A. B. Wheeler Sur.
Set 10¾-in. csg. 207 ft.; S.D. 1,290 ft.

ORANGE COUNTY

Blue Line Oil Co.'s No. 1 Godwin, Richard Ballew Sur., 300 ft. from E line and 150 ft. from NE line of Godwin 20-ac. tract.
S.D. 2,770 ft.

POLK COUNTY

C. & C. Drlg. Co.'s No. 1 Granbury & Smith, 600 ft. N and 600 ft. W from most western NW cor. of Gulf Prod. Co.'s Graybury & Smith lease, in the Wm. Shadburn Sur.
Derrick.
Howard Dailey et al's No. 1 Z. B. Knox, 1,450 ft. W and 1,920 ft. S of NE cor. of F. Chairs Sur., 16 miles NE of Corrigan.
S.D. 60 ft.
J. F. Anderson's No. 1 E. L. Duke (O.W.D. D.), 400 ft. from E and 350 ft. from S of SW cor. of P. Michelick 50-ac. lease, Abst. 59, P. J. Mineral Sur.
Waiting on a new mud pump; T.D. 5,364 ft.
Marathon Oil Co.'s No. 1 A. S. Jones, 990 ft. from NW and SW lines of J. D. Thomas Sur.
Derrick.
Dick Schwab's No. 1 Lynch, 330 ft. out of

NW cor. of 200-ac. tract in the George Jameson Sur.
Location.

REFUGIO COUNTY

Cecil Hagen et al's No. 1 Edith Clarkson, 1,736 ft. from N line, 3,820 ft. from E line of J. Coughlin Sur.
Location.
Magnolia Pet. Co.'s No. 1 F. B. Rooke, 330 ft. from S line, 7,150 ft. from W line of Donna Roogas Sur.
S.D. 1,243 ft.

SAN AUGUSTINE COUNTY

Fidelity Exploration Co.'s No. 2 Bryan & Flournoy, 400 ft. from No. 1.
Drlg. shale 1,600 ft.

TRINITY COUNTY

Moore and McLaughlin's No. 1 White, 250 varas from N line, 262 varas from E line of 56-ac. tract, Goff Sur.
Rig up.

WALKER COUNTY

Seaport Oil Co.'s No. 1 W. B. Ross, in SE cor. of an 80-ac. tract out of the Wm. Hodge Sur.
10¾-in. csg. 256 ft.; T.D. 300 ft.

WALLER COUNTY

Stanolind O. & G. Co. et al's No. 1 J. W. Tharp, 466 ft. from S and E lines of J. M. Bennett Sur. No. 100.
Coring sand 6,925 ft.

WHARTON COUNTY

Whitehead and Rash's No. 1 C. T. and D. Kountze, 1,320 ft. from N line, 330 ft. from E line of S.A.&M.G. Sur., Sec. 1, Abstr. 328.
Location.

SOUTH LOUISIANA
ACADIA PARISH

Humble O. & R. Co.'s No. 1 American Rice Mills, 660 ft. S and 1,320 ft. W from NE cor. Sec. 27-10s-1e.
Drlg. sand 6,669 ft.
Superior Oil Co. et al's No. 1 A. S. Newman, 2,000 ft. N and 1,120 ft. E of SW cor. Sec. 24-7s-1w.
Drlg. shale 6,727 ft.

ASCENSION PARISH

Humble O. & R. Co.'s No. 2 S. Gumbel & Co., 500 ft. southwesterly from No. 1, 275 ft. easterly from road and approx. 475 ft. N of S line of tract, Sec. 33-10s-3e.
Drlg. shale 5,694 ft.

AVOYELLES PARISH

Southern State Pet. Co.'s No. 1 Boyette, 330 ft. N and 330 ft. E of SW cor. Sec. 28-3n-5e.
Rig up.

BEAUREGARD PARISH

Richardson & Martin's No. 1 Southwest Lbr. Location.

CALCASIEU PARISH

Fohs Oil Co.'s No. 1 McIvor, 330 ft. S and W of NE cor. Sec. 14-9s-8w.
Location.
Fohs' No. 1 O. H. Castle, 330 ft. S and 330 ft. W of C Sec. 18-9s-8w.
7-in. csg. 6,900 ft.; T.D. 6,917 ft.; tested gas, small amount of oil; to pull screen and setting and take another core.
Gulf Prod. Co.'s No. 1 H. Starks et al, 1,650 ft. W and 1,980 ft. S of NE cor. Sec. 26-11s-12w.
Rig up.
Humble O. & R. Co.'s No. 1-B Industrial Lbr. Co., 466 ft. N, 1,399 ft. W of the SE cor. Sec. 27-8s-12w.
Drlg. shale 9,433 ft.
Plummer & McDaniels' No. 1 Cockburn-Hood, 1,072 ft. E and 2,400 ft. N of SW cor. Sec. 13-10s-12w.
Drlg. shale 6,490 ft.
Texas Co.'s No. 1 Nickerson, 3,139 ft. N and 3,238 ft. W of SE cor. Sec. 12-9s-8w.
Location.
Union Sulphur Co.'s No. 1 Powell Lbr. Co., 600 ft. N of No. 1 State, Sec. 12-9s-8w.
Drlg. shale 2,530 ft.
Union Sulphur Co.'s No. 2 State, 748 ft. S and 8 ft. E, NW cor. SW Sec. 12-9s-8w.
Driving piling.
Wheeler Oil Co.'s No. 1 Gabbert, 1,322 ft. E and 648 ft. N of SW cor. of Sec. 28-9s-7w.
Drlg. shale 7,050 ft.

EAST FELICIANA PARISH

Thompson Creek Oil Co.'s No. 1 Fannie Noland, 2,600 ft. E and 1,580 ft. N of SW cor. Sec. 70.
S.D. 1,490 ft.

EVANGELINE PARISH

Humble O. & R. Co.'s No. 1 Haas, 1,250 ft. SE of Bayou Nezpique, 466 ft. NE of SW line of Sec. 22-4s-1w.
Drlg. sandy shale 7,544 ft.

CAMERON PARISH

Texas Co.'s No. 1 Jessen, 1,170 ft. E and 650 ft. N of C Sec. 24-14s-10w.
T.D. 4,551 ft.; P.B. 4,400 ft.; to sidetrack.

JEFFERSON DAVIS PARISH

George W. Strake's No. 1 Calcasieu Natl. Bank, 200 ft. S and E of NW cor. SE NE Sec. 12-9s-6w.
Drlg. shale 7,570 ft.

JEFFERSON PARISH

Texas Co.'s No. 1 Bayou St. Dennis, 25,967 ft. S, 4,853 ft. E of NW cor. of Twp., Sec. 19-17s-24e.
Building foundation.

LAFOURCHE PARISH

Barasdall Oil Co.'s No. 3 Harang Plantation.
Drlg. shale 5,850 ft.
Emerald Pet. Co.'s No. 1 Bowie Lumber Co., 4,431 ft. N and 1,632 ft. E of SW cor. Sec. 53-19s-5e.
Drlg. shale 6,920 ft.
R. L. Gay, trustee's No. 1 Godchaux, 3,920 ft. N and 1,746 ft. E in common cor. of Lots 34 and 36, Twp. 15s-19e.
S.D. 6,226 ft.
Southern Sulphur Corp.'s No. 1 D. L. Lagraize, 300 ft. E of NW cor. of Lot 7, thence 350 ft. S of Sec. 26-21s-22e.
Spudded and shut down.

PLAQUEMINES PARISH

Venice Corp.'s No. 1 Burras.
Drlg. shale 1,634 ft.

RAPIDES PARISH

J. B. Evers' No. 1 G. Wettermark, 540 ft. S and 520 ft. E, NW cor. NE SW Sec. 35-6n-2e.
Rig up and S.D.
C. D. Loe's No. 1 Barrett, 330 ft. NW of SE line and 330 ft. NE of SW line of Sec. 40-5n-1w.
Rig up and S.D.

ST. BERNARD PARISH

Danciger's No. 1 Battles, 536 ft. N, 2,198 ft. W of SE cor. Sec. 135-14s-14e.
Cmtd. csg.; moved off rig; T.D. 6,001 ft.

ST. LANDRY PARISH

Bailey Gaunce's No. 1 Lewis, 200 ft. N and E of SW cor. of NW of NE of Sec. 29-5s-6e (workover).
Washing to bottom 5,043 ft.
H. J. Weir's No. 1 Declouet, Sec. 108-8s-5e, near Lafayette Parish line and 3 miles N of Anse La Bute Field.
S.D. 2,322 ft.

ST. MARTIN PARISH

Texas Co.'s No. 6 St. Martin Land Co., 660 ft. S and 500 ft. W of NE cor. SE Sec. 17-8s-7.
T.D. 9,767 ft.; drill pipe stuck.

TANGIPOHA PARISH

R. A. Compton's No. 1 Lake Superior Piling Co., 200 ft. W and N of SE cor. Sec. 19-5s-9e.
Location.

VERMILLION PARISH

Moore Bros.' No. 1 Brussard, 350 ft. S of N line, 250 ft. E of W line, NE cor. Sec. 32-11s-3e.
T.D. 4,056 ft.; fishing.

La.-Ark. Wildcats

(Continued from Page 60)

Clyde Crichton's No. 1 Friedman Est., 466 ft. N, 428 ft. E, SW cor. Sec. 52-7-6.
Coring 2,060 ft.
Jack Lent's No. 1 Brown Lbr. Co., 400 ft. S, 360 ft. E, NW cor. NE SW Sec. 27-9-13.
T.A. 2,470 ft.; old T.D. 3,002 ft.
Missouri Drlg. Co.'s No. 1 Brown Lbr. Co., 400 ft. N, 330 ft. W, SE cor. Sec. 5-10-10.
S.D. 1,033 ft.
Roy A. Raines et al's No. 1 Raines est., 330 ft. N and E, SW cor. Sec. 8-9-10.
Drlg. 2,880 ft.

RAPIDES PARISH

C. D. Loe, trustee's No. 1 Baird Est., SE cor. Sec. 40-5n-1w.
Rigging up.

RED RIVER PARISH

Sterling O. & R. Co.'s No. 1 Long Bell, 150 ft. N and W, SE cor. NE SE Sec. 19-13-9.
Rigging up.
Windsor Oil Co.'s No. 3 Jenkins, 1,905 ft. E, 660 ft. N, SW cor. Sec. 11-12-11.
Used acid 1,740 ft.

SABINE PARISH

H. J. Brothers et al's No. 1 Edwards, 300 ft. S and W, NE cor. SW NW Sec. 29-9-13.
W.O.S.R. 1,527 ft.
R. B. Campbell et al's No. 1 Cook Land Co., 150 ft. N, 300 ft. W, SE cor. NW NW S.D. 2,130 ft.
Tested dry after acid; S.D.; W.O. 1,935 ft.
Helena Oil & Gas Co.'s No. 1-B Graham, 330 ft. S and W NE cor. NE NW Sec. 20-9-13.
S.D. 2,000 ft.
Lawson-Leavell's No. 1 Whitney Corp., 330 ft. N and E, SW cor. NE SW Sec. 5-9-13.
Whipstocking 2,742 ft.
Jack Lent's No. 1 Williams, Sec. 13-7-11.
Partly rigged up and S.D.
Dr. O. B. Hicks' No. 1 Neal, SE SW SE Sec. 18-9-12.
Set 10-in. 40 ft.
Strickland et al's No. 1 Whitney Corp., Sec. 32-10-12.
Set 10-in. 20 ft.; drlg. 1,250 ft.

TENSAS PARISH

Schumacher, tr.'s No. 1 Curry, Sec. 39-11-12e.
Arranging to deepen 3,750 ft.

UNION PARISH

Interstate Nat. Gas Co.'s No. 1 Jenny, 1,950 ft. N, 735 ft. W of C, Sec. 7-20-4e.
Set 6-in. 2,092 ft.

ARKANSAS

ARKANSAS COUNTY

Grand Prairie Realty Co.'s No. 1 Fischer, 200 ft. S and E, NW cor. NE NW Sec. 6-6s-4w.
Testing 1,724 ft.; (corrected).

ASHLEY COUNTY

J. D. Henseman et al's No. 1 Boreine Farms, 660 ft. S and W, NE cor. Sec. 1-18-8.
Derrick.

CALHOUN COUNTY

R. J. McMurray's No. 3 Callon Lbr. Co., 330 ft. N and W, SE cor. Sec. 33-15-14.
Set 10-in. 190 ft.; drlg. 2,125 ft.

HEMPSTEAD COUNTY

E. A. Austin's No. 1 McWilliams, 300 ft. N and W of SE cor. NW SW Sec. 19-13-23.
S.D. 2,470 ft.
A. H. Bagnelle's No. 1 Trattner & Rhinehart, Sec. 2-13-26.
S.D. 1,992 ft.

LAFAYETTE COUNTY

Douglas Lawn's No. 1 Camp, 330 ft. S and W, NE cor. SW SE Sec. 14-15-23.
S.D. 2,910 ft.
W. H. Harvey's No. 2 Allen, Sec. 18-19-24.
S.D. 850 ft.

LONOKE COUNTY

J. G. Strahan's No. 1 Hardin, Sec. 18-2s-7w.
Drlg. 1,120 ft.; O.W.D.D.

MILLER COUNTY

Duluth-Ark. Oil Co.'s No. 4 Beck, SE cor. SE SW Sec. 34-15-26.
W.O.S.R. 2,941 ft.
Fitzwater et al's No. 1 Norson, SW cor. SE SW Sec. 20-15-27.
S.D. 3,177 ft.
Ark. Oil, Gas & Ref. Co.'s No. 1 Beck, SW cor. NW SW Sec. 34-15-26.
1,200 ft. oil in hole at 2,920 ft.
King Oil Corp.'s No. 1 C. H. Schroder, 200 ft. N, 330 ft. E, SW cor. SW NE Sec. 24-14-28.
Reaming to bottom 3,020 ft.
Magnolia Pet. Co.'s No. 6 Olivet, 330 ft. S and E, NW cor. NE NW Sec. 2-16-24.
Set 8⅝-in. 2,933 ft.
A. C. Roan's No. 1 Frost Est., 150 ft. N and W, SE cor. SE SW Sec. 8-15-26.
Set 10-in. 130 ft.
Thorntree Oil Corp.'s No. 2 E. H. Beck, SE cor. SW SW Sec. 34-15-26.
W.O.S.R. 2,933 ft.
Lee Timberlake's No. 1 Frost Est., 330 ft. N and E, SW cor. SW SE Sec. 27-15-26.
S.D. 1,275 ft.
John Wrather's No. 2 H. E. Beck, 330 ft. N and W, SE cor. SW SE Sec. 34-15-26.
Moving in rig.

NEVADA COUNTY

O. F. Whittaker's No. 1 Wesley, Sec. 2-15-20.
Set 4½-in. 2,098 ft.; T.D. 2,142 ft.

OUACHITA COUNTY

F. A. Book et al's No. 1 Arnold, Sec. 24-15-16.
S.D. 2,032 ft.
T. J. Gaughan's No. 1 Cartier, 330 ft. S and E, NW cor. SE SE Sec. 25-13-18.
Drlg. 2,160 ft.
T. J. Gaughan's No. 1 Bragg, 330 ft. N and E, SW cor. NE SE.
Comp.; pumping 50 bbls., 1,369 ft.

UNION COUNTY

Alice-Sidney Oil Co.'s No. 3 Gregory, C NW NW SW Sec. 11-17-14.
Dry and abd. 3,577 ft.
Bellevue Corp.'s No. 1 J. M. Gregory, C SE SW NE Sec. 10-17-14.
Rig moved; hole abd. at 1,346 ft.
J. E. Crosbie, Inc.'s No. 1 E. F. Gregory, 330 ft. S and E, NW cor. NE SW Sec. 10-17-14.
Drlg. plug 3,347 ft.
J. E. Crosbie, Inc.'s No. 1 W. E. Gregory, 330 ft. S and E, NW cor. NE Sec. 15-17-14.
Coring 3,365 ft.
Durand Dev. Co.'s No. 1 Ezzell, 330 ft. S and W, NE cor. Sec. 13-17-15.
Rigging up.
H. L. Hunt, Inc.'s No. 12 E. F. Gregory, C NW SE SE Sec. 10-17-14.
Testing 3,333 ft.
H. L. Hunt, Inc.'s No. 9-A J. D. Gregory, C NW SE NE Sec. 10-17-14.
Drlg. 2,689 ft.
E. R. Henderson's No. 2 Vines, NW cor. SW SE Sec. 29-18-14.
Drlg. 1,345 ft.
H. L. Hunt's No. 14 E. F. Gregory, 330 ft. S and W, NE cor. SW SW Sec. 11-17-14.
Set 7-in. 3,288 ft.
H. L. Hunt's No. 15 E. F. Gregory, 330 ft. N and W, SE cor. Sec. 10-17-14.
Set 10-in. 157 ft.; drlg. 1,063 ft.
M. D. Ingall's No. 1 A. J. Perdue, C SE NW SW Sec. 4-17-14.
Derrick.
T. L. James & Co.'s No. 1 Gregory, 330 ft. S and W, NE cor. N½ NW SW Sec. 10-17-14.
Rigging up.
Mrs. R. K. Jones et al's No. 1 Davis, 330 ft. N and W, SE cor. NW NW Sec. 28-16-14.
Set 7-in. 2,746 ft.; T.D. 2,765 ft.
Lion Oil Ref. Co.'s No. 6 H. L. Rowland, 330 ft. S and W, NE cor. Sec. 15-17-14.
Drlg. 2,625 ft.
C. H. Murphy's No. 1 Union Saw Mill Co., 330 ft. N, SE cor. NW SE Sec. 29-18-11.
Set 10-in. 198 ft.
C. E. Murdock's No. 8 J. M. Gregory, C NW NE SE Sec. 10-17-14.
Rigging up.
C. E. Murdock, Inc.'s No. 7 J. M. Gregory, 330 ft. N, 330 ft. W, SE cor. NE SE Sec. 10-17-14.
Fishing for D.S. 3,317 ft.
Reuter Oil Co., Inc.'s No. 1 J. L. Kinard, 330 ft. S and E, NW cor. SE NW Sec. 32-18-14.
W.O.S.R. 2,189 ft.
Geo. L. Pace's No. 1 Union Saw Mill Co., 330 ft. S and W, NE cor. NE SW Sec. 24-18-12.
Set 10-in. 186 ft.
S. H. A. Oil Co.'s No. 4 Taylor, 330 ft. N and E, SW cor. NW SE Sec. 10-17-14.
Drlg. 2,342 ft.
S. H. A. Oil Co.'s No. 3 Taylor, 330 ft. S and W, C Sec. 10-17-14.
Drlg. 2,885 ft.
S. H. A. Oil Co.'s No. 2 J. W. Taylor, 330 ft. S and W, NE cor. NW SE Sec. 10-17-14.
W.O.S.R. 3,467 ft.
Skelly Oil Co.'s No. 7 Perdue, 330 ft. N and E SW cor. SE NW Sec. 10-17-14.
Location.
Marine Oil Co.'s No. 1 Townsend, 330 ft. N and E, SW cor. SW NE Sec. 10-17-14.
Dry and abd. 3,470 ft.
Tubal Pet. Co.'s No. 1 Gaddy, 340 ft. N and E, SW cor. SE Sec. 14-17-14.
Dry and abd. 3,416 ft.

WOODRUFF COUNTY

L. P. Lively's No. 1 Perkins, 330 ft. N, 360 ft. E, SW cor. SE SE Sec. 5-5n-2w.
Rigging up.
J. N. Watkins et al's No. 1 Upshaw, 330 ft. N and E, SW cor. S WSec. 17-5n-2w.
Rigging up.

MISSISSIPPI

AMITE COUNTY

Mineral Resources, Inc.'s No. 1 Anderson, C NE NW Sec. 14-3n-3e.
S.D. 550 ft.

BOLIVAR COUNTY

White & Jones' No. 1 Ballou, SE SE NW Sec. 17-24n-7w.
S.D. 20 ft.

CLARKE COUNTY

Clarke County Oil Co.'s No. 1 Dora Butler, C SW SW Sec. 15-3n-16e.
Set 10-in. 62 ft.

HARRISON COUNTY

Big Ridge Oil Co.'s No. 1 Hinzin, NE Sec. 12-7s-10w.
S.D.; W.O. 1,100 ft.

HINDS COUNTY

Atkins & Hightower's No. 2 Sander, 660 ft. E, 160 ft. N, SW cor. NW SW Sec. 20-6n-2e.
Set 4½-in. 2,430 ft.

ISSEQUENA COUNTY

Pelican Oil & Gasoline Co.'s No. 1 Martin & Bender, 300 ft. S and E, NW cor. Sec. 11-12n-8w.
Drlg. 3,150 ft.

JONES COUNTY

Snow-Black Pet. Co.'s No. 2 Watson, 520 ft. W, 200 ft. S, C Sec. 24-7n-13w.
T.A. 3,900 ft.

LAUDERDALE COUNTY

Bob Dalton's No. 1 Bounds, Sec. 34-7n-15e.
Set 10-in. 560 ft.; S.D.; W.O.

MONROE COUNTY

P. J. McAlpine's No. 1 Frank Rye, Sec. 11-15s-17w.
Set 6⅝-in. 3,100 ft.
P. J. McAlpine's No. 1 Crook, 1,090 ft. S 90 ft. W, NE cor. Sec. 15-13s-13w.
Drlg. 1,350 ft.

SIMPSON COUNTY

Berry Corp.'s No. 2 R. T. Berry, Sec. 32-2n-4e.
Dry and abd. 2,635 ft.

WALTHALL COUNTY

Mutual O. & G. Co.'s No. 1 Boyd, SW cor. SW SE Sec. 24-2n-9e.
Partly rigged up and S.D.

WASHINGTON COUNTY

Perkins & Dees' No. 1 Lee, 1,500 ft. E, 100 ft. N, SW cor. Sec. 33-16n-3w.
Set 10-in. 300 ft. and S.D.

WINSTON COUNTY

Jack Vale et al's No. 1 Moody, 712 ft. N, 667 ft. E, SW cor. NW SW Sec. 3-13n-14e.
Drlg. 785 ft.

La.-Ark. Proven Fields

NORTH LOUISIANA

CADDO—BLANCHARD

W. T. Boyd's No. 3 Mitchell, Sec. 6-18-14.
Moving in rig.
Louana O. & G. Co.'s No. 3 Cushman, SE cor. SW SW Sec. 33-19-16.
Comp.; 150,000 ft. of gas, 925 ft.

CADDO—HOSSTON

Shoreline Oil Corp.'s No. 44 Crystal, 220 ft. S and E of C Sec. 13-21-16.
Derrick.

SABINE PARISH—ZWOLLE

Alexander & Crane's No. 1 Fogman, SE cor. N½ SW NE Sec. 18-7-11.
S.D.; W.O. 2,373 ft.
Ivan A. Allen's No. 1 La. Long Leaf, 330 ft. N and W, SE cor. NW SE Sec. 12-7-11.
S.D. 2,120 ft.
Crichton & Co.'s No. 1 Williams, 660 ft. N and E, SW cor. SW SE Sec. 6-7-11.
Tested dry; S.D.; W.O. 2,592 ft.
Dyer et al's No. 1 McCollister, 330 ft. S and E, NW cor. SW NE Sec. 24-7-12.
S.D. 1,100 ft.
Foster & Hartman's No. 1 Bowman Hicks, 330 ft. S and E, NW cor. NE Sec. 10-7-11.
Dry and abd. 2,696 ft.
E. D. Holcomb's No. 1 Porter, 330 ft. S, 330 ft. W, NE cor. SE Sec. 7-7-11.
Pulling liner 2,580 ft.
H. C. Maulding's No. 1 Davis, 350 ft. N and W, SE cor. NE NE Sec. 2-7-11.
Rigging up.
H. C. Maulding's No. 2 DeLatin, 330 ft. S and E, NW cor. NE SE Sec. 3-7-11.
S.D. 2,250 ft.
K. C. Peterson et al's No. 1 Bowman-Hicks, 330 ft. S and E, NW cor. SW NW Sec. 2-7-9.
Derrick down.
W. L. Posey's No. 1 Burkett, 330 ft. N and E, SW cor. NW SW Sec. 10-9-13.
W.O.S.R. 2,011 ft.
Tex.-La.-Ark. Oil Co.'s No. 1 Pickering Lbr. Co., Sec. 3-3-12.
Recmtd. 10-in. 134 ft.; T.D. 2,210 ft.
S.D. 2,742 ft.

EAST TEXAS (BORDER COUNTIES)
CASS COUNTY

Broderick & Calvert's No. 2 Cagle, H. Cunningham Sur.
Dry and abd. 4,002 ft.

HARRISON COUNTY

R. C. Payne et al's No. 1 Lowery, E. D. Spain Sur.
P.B. to 3,524 ft.

MARION COUNTY

Ed S. Holman's No. 1 Henderson, R. Bennington Sur.
Junked hole; skidded over and R.U. on new hole.

PANOLA COUNTY

R. H. Davis' No. 1 Wooten Est., Winnie Mann Sur.
Cmtd. back and testing.
Givens & Holloway's No. 1 Wooten est., Winnie Mann Sur.
T.A. 2,153 ft.
R. W. Price's No. 1 Crawford, J. A. Williams Sur.
Set 10-in. 64 ft.
Fred Stovall Drlg. Co.'s No. 1 H. D. Ivey, P. Martin H.R.S.
S.D. for csg. 1,980 ft.
Thomason Drlg. Co.'s No. 1 Cadenhead, Jas. Smith Sur.
Rigging up.

SHELBY COUNTY

Cliff Stovall's No. 1 Pickering Lbr. Co., C H. Patterson Sur.
S.D.; rig repair, 1,485 ft.
O. P. Bush, trustee's No. 1 Pickering Lbr. Co., P. W. Harvey Sur.
S.D. 730 ft.

ALABAMA
CONECUH COUNTY

Ray L. Eastabrook's No. 1 Miller Mill Co., W½ NE Sec. 1-4n-12e.
Rigging up.

COVINGTON COUNTY

Geometer Prod. Corp.'s No. 1 Culbreath, SW cor. SW NE Sec. 3-2n-14e.
Rigging up.

HOUSTON COUNTY

Rice O. & G. Co.'s No. 1 Oakley est., SE cor. NW SW Sec. 9-3n-29e.
S.D.; W.O. 2,506 ft.

LAMAR COUNTY

DeSoto O. & G. Corp.'s No. 1 Gardner, Sec. 22-15s-16w.
S.D. 4,183 ft.

NEW AND IMPROVED EQUIPMENT

Fisher Regulator Controls Intermittent Flow of Gas

A new cycle or intermittent flow controller has been developed by the Fisher Governor Co., Marshalltown, Iowa, especially for controlling the input high pressure gas to oil wells flowed by the intermittent gas lift system. Outstanding construction features are included in this

device which is said to have been proved by numerous installations in the Oklahoma City Field.

The main valve consists of a single-seated steel body, sizes 1 inch to 2 inches inclusive, for pressures up to 1,000 pounds. This valve is diaphragm controlled and actuated by a clock, cam, and pilot valve.

The clock and pilot mechanism is mounted as an integral part of the upper diaphragm casing. The weather-proof cover is easily removed to allow inspection or changing of cam setting. The 24-hour clock is wound through a plugged opening in the cover. Clocks with cams for one complete rotation in 1, 6 or 24 hours are available. Cam notches which govern the frequency of the input gas are cut on the job after installation is made.

Pump for Extremely High Lifts Is Designed by BJ

Development of a specially designed pump for extremely high lifts or a high-pressure water supply, is announced by the Byron Jackson Co., Department 35, Berkeley, Calif. The pump, known as the Hydropress, embodies the proven principle of centrifugal pumps and permits the building of pressures up to 2,800 pounds. The number of stages ranging from 4 to 54, depends upon conditions. The pump capacity ranges from 10 to 250 gallons per minute. Four standard sizes are available, 8-inch, 10-inch, 12-inch and 15-inch.

This type of pump is said to be especially desirable in refineries where a high-pressure water supply is required.

NEW TYPE POWER CAPACITORS

A new line of hermetically sealed power capacitors about one-half the size and one-third the weight of conventional oil filled units is announced by the Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa. The individual units are impregnated with the new Westinghouse fireproof impregnating medium interleen, are housed in welded cases of .05 sheet steel, and equipped with rugged solder seal porcelain terminal bushings. Because of their compact, lightweight, and leakproof design, these new capacitors expand the economical use of power factor correction in many industrial plants.

Among the Equipment Houses

New representatives of the Nurnberg Thermometer Co., 397 Bridge Street, Brooklyn, N. Y., are F. Lee Murdock, 8 North Cheyenne Avenue, Tulsa, and Martin W. Gary, 415 Commerce Street, Fort Worth, Tex., each carrying a complete stock of thermometers and hydrometers used in the oil field. The company has opened a western division sales office in the Pacific National Building, Los Angeles, Calif., in charge of Charles Nurnberg.

—

The Marmon-Herrington Co., Inc., Indianapolis, Ind., has promoted Robert C. Wallace from service manager to assistant chief engineer and Harold B. Blank from assistant service manager to service manager.

—

C. Parker Holt has been named executive vice president of the Caterpillar Tractor Co. Thomas J. Conner was made vice president in charge of manufacturing and was elected a director to succeed the late Pliny E. Holt.

—

H. S. Lindemuth, formerly with Lucey Products Corp. and Bridgeport Machine Co., is now handling sales of the Larkin Packer Co., St. Louis, Mo., in Oklahoma and Kansas. His headquarters are in the company's new Tulsa warehouse at 41 South Elwood Avenue.

—

The Ernest E. Lee, 53 West Jackson Boulevard, Chicago, has been appointed by the Coppus Engineering Corp., Worcester, Mass., to handle the Coppus air filters for air compressors, internal combustion engines, industrial and ventilating applications.

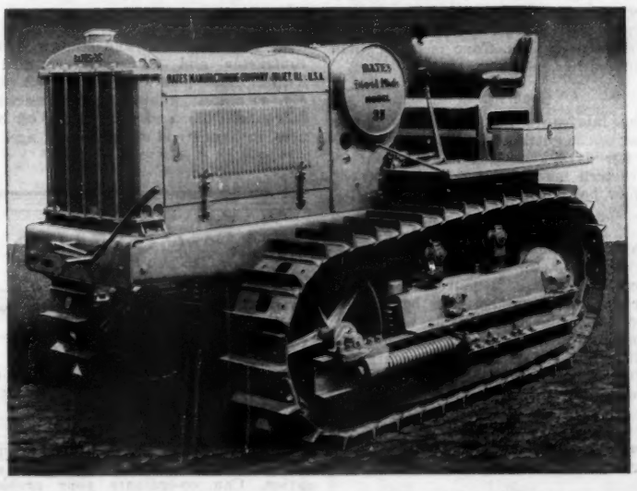
—

The Pittsburgh Equitable Meter Co., Pittsburgh, Pa., has opened a district office at 67 McCall Street, Memphis, Tenn., with Z. A. Stanfield manager. J. H. Ferguson is associated with him. The Memphis office serves Alabama, Mississippi, Kentucky, Tennessee and portions of Louisiana, Georgia and Florida.

—

John H. Baird, New York and foreign sales representative for several large American manufacturers of oil-well equipment, has enlarged his representation to include the Security Engineering Co. of Whittier, Calif., manufacturer of Sievers reamers. Mr. Baird's office is in the Graybar Building, New York.

Bates Announces Model 35 Tractor With New Features



The Bates Manufacturing Co. of Joliet, Ill., announces a new Model 35 tractor, incorporating the advantages of the old Bates 35, with new features. The improved design is said to provide greater riding comfort, greater steering ease, smoother operation and longer life. The rear-end engine vibration which often results from the play in wearing clutch parts is eliminated by a unique design for the main engine clutch and transmission.

The crawler housing supporting the track idlers has been extended to give greater protection to the drive sprocket. The wide track rail has been retained and through the installation of a specially designed electric furnace of the continuous type, uniform heat treating of track shoes has been made possible.

Greater clearance has been introduced between the truck wheel flanges and track rails, assuring longer wear before flange replacement is necessary.

The deep leather upholstered seat has been moved back to provide more leg room. The operator sits directly over the axle, thus riding on a gently pivoting point instead of a pitching point such as is experienced when the seat is forward or backward of the crawler axle.

The braking pressure of the steering brakes has been increased and the crawler can be stopped with a relatively light pressure of the foot. The drag links between the steering clutch operating levers and the bell cranks on the clutches are adjustable at both ends. This permits maintaining the hand-steering lever and bell cranks in a constantly relative position regardless of the wear of the steering clutch faces, and in addition, takes up the wear of both ends of the drag link.

The new tractor has a drawbar pull of slightly over 43 horsepower and can be powered for either Diesel, oil or gasoline.

Men Well Known in the Equipment Field

K. G. MERRILL

The M. B. Skinner Co., South Bend, Ind., manufacturer of pipe repair clamps and saddles for steel and cast iron pipe, has announced the personnel of its official family, following the death of M. B. Skinner, the founder, last June.

In December, 1933, the controlling interest in this concern was purchased by the following four men, who assumed office January 9, 1934, in the capacities named: K. G. Merrill, president; F. R. McMurray, vice president, sales; P. D. Merrill, vice president, production; Harry E. Southard, southwestern representative.

K. G. Merrill reports that the M. B. Skinner Co. had the biggest year in 1934 since it was established in 1898.

VORTOX PROVIDES CLEAN AIR

In a recent issue of The Oil & Gas Journal, an explanation of the Vortox air cleaners, made by the Vortox Manufacturing Co., Claremont, Cal., said that approximately 90 per cent of the dirt was washed out of the air in the centrifugal chamber below the filtering medium. In view of the fact that some engineers have taken this figure as representing the efficiency of the cleaner, it should be explained that a supplementary cleaning process takes place in the filter element itself, which brings the efficiency of the air cleaner to as high as 99½ per cent. Most of the dirt which is washed out of the air in the centrifugal chamber never reaches the filter element at all, but is washed immediately into the bottom of the unit, where it can be removed.

SPECIALIZES IN TANK TREATING

The Air Spray Painting Co., Box 5005, Dallas, Tex., has gone much beyond the scope indicated by its name and is specializing in the reconditioning and painting of tanks, making a particular study of each individual problem. The company caulks, cleans, sand-blasts and paints oil storage tanks and treats them for prevention of hydrogen sulphide corrosion. It also cleans all kinds of refinery equipment. E. S. King, president, and J. F. Lawrence, secretary-treasurer, had long experience in the oil industry.

Pipe Line Construction

BRAZORIA COUNTY LINE

FORT WORTH, Tex., Jan. 7. — The Stanolind Pipe Line Co. will begin immediately the construction of a 6-inch oil pipe line from the discovery well, No. 1 Surface, in the Pearland section of Brazoria County, to a point on the Houston-Galveston highway near Webster, tying in there with the company's main 12-inch trunk line from North Texas to Texas City. The Stanolind maintains a tidewater terminal at Texas City, and the Pan American, another Indiana subsidiary, is completing a 30,000-bbl. refinery there.

The new 6-inch feeder line will have a capacity of approximately 9,000 bbls. daily. It is announced the line will be finished and in operation by the end of January.

EAGLE PASS GAS LINE

EAGLE PASS, Tex., Jan. 7. — Construction of a 40-mile gas pipe line from the Chittim wells, 19 miles east of Eagle Pass, to the town of La Pryor, has been started by the N. H. Saigh Construction Co., which has a contract to build the line for the Texas Gas Utilities Co. It will be connected at La Pryor with the gas company's main line, which served the winter garden district of the Rio Grande valley.

HEARING ON DETROIT LINE

MUSKEGON, Mich., Jan. 7.—Michigan Public Utilities Commission, after taking preliminary testimony on an application by the Michigan Industrial Natural Gas Co. for a permit to lay a pipe line from the Central Michigan gas fields to Detroit, adjourned the hearing for three weeks pending further study of the application. The commission will require additional information with regard to financing the cost of the new line estimated to mean an expenditure of $5,000,000 or more.

A. T. Sarkisson heads the company which seeks to serve Saginaw, Bay City, Flint and Pontiac industrial interests as well as Detroit industries through the proposed new line. Mr. Sarkisson told the commission industrial markets already have been assured the company in these cities if the permit is granted while approximately 70,000,000 feet of gas daily is now under option in Central Michigan fields near Mount Pleasant.

The Detroit City Gas Co. in announcing a new rate schedule said a 1934 survey of natural gas resources failed to show sufficient reserves at this time to warrant bringing natural gas to Detroit for domestic purposes. The State Commission indicated in a recent hearing on an emergency connection from the Muskegon Gas Co., domestic supplier to the West Michigan Consumers Co., exclusive industrial operator, in Greater Muskegon, that it would require considerable assurance before granting permanent use for industrial purposes that domestic consumers would be protected over a long period of years.

Mr. Sarkisson announced his company would start immediately an extensive natural gas drilling campaign throughout the State if permit for the Detroit line is granted.

Frank S. Schneider, division superintendent Tide Water Oil Co. in charge of West Texas and New Mexico with headquarters at Midland, Texas

Expecting Improvement in Chicago Market Area

(Continued from Page 73)

the tight position of distillate is boosting kerosene's price position.

Heating Oils

Most of the good grades of heating oils are strong and some of them seem on the verge of slight additional advances, especially good distillate and gas oil, none of them any too plentiful in the open market. Moreover, recent advances in tank wagon prices at Chicago and elsewhere seem to be protecting distributors from a pinch. In this connection, range oil is now being quoted for the first time in Chicago, at a price of 7 cents for quantities.

Industrial Oils

Gradual increasing of activity in steel mills and other industrial consumers is slightly brightening the outlook for heavy fuels and gas oils, but in the immediate Chicago district, fuel oil prices are not yet greatly changed. Tone is better than it was earlier, however.

Lubricants

The lubricants business seems to be taking on a little brighter hue in the last few days, reflecting improvement in the eastern market. Demand is expected to show betterment soon.

Naphthas

Naphthas remain dull. The two-tenths cent reduction in tank wagon price in Illinois applies only to petroleum spirits, other naphthas and solvents being still subnormal. This reduction, as with tank wagon gasoline, is due to removing of the Illinois 2 per cent retail occupational tax from the price of the product, as was stated earlier in these columns.

Wax

Wax remains dull. Prices are unchanged and volume of business is fair.

Coke

Petroleum coke is opening the new year quietly. Demand remains quite good.

Kansas Fields

(Continued from Page 55)

cellar dug for No. 2 Hefferman, C SW NW NE Section 26-15-13w. Hershey & Ashby were building rig for No. 1 Eichmer, NW NW SE Section 34-15-13w.

Wabaunsee County

Reserve Oil Co. and others made a location for No. 1 Moore, C NW NW SW Section 15-13-12, Wabaunsee County.

Trego County

Marathon Oil Co. abandoned its deep test in Trego County, No. 1 Kline, SW SW SE Section 19-14-24w, at 5,339 feet. It was barren of oil all the way. Mississippi lime was topped at 4,402 feet and granite wash at 5,252 feet.

Jack Blalock Slated for High Post in Texas Oil

WASHINGTON, D. C., Jan. 7.—Jack Blalock, prominent in oil circles of Texas, is slated for a high berth in the oil administration of the State, according to information available here. Rumors have it that after Governor-elect James V. Allred takes office he will remove from the jurisdiction of the Texas Railroad Commission all power over the oil and gas resources of the State. In place of the jurisdiction now being wielded by the Railroad Commission there would be set up an oil and gas commission with Mr. Blalock as its chairman. Recently Mr. Blalock has been an adviser to the governer-elect on the subject of oil and gas and other natural resources of the State.

JACK BLALOCK

DEATH OF J. A. CAMPBELL

J. A. Campbell, well known drilling contractor and oil producer, died in Tulsa, Friday, January 4, age 62 years. Mr. Campbell was born and reared in Marietta, Ohio, and entered the oil business in that field at an early age. He became a drilling contractor while in Ohio, but moved westward with the opening of new fields, arriving in the Oklahoma Field 21 years ago. Since that time he had drilled many wells in the Mid-Continent and accumulated considerable production of his own. He also owned a stock farm near Vera, Okla. Mr. Campbell was a member of the Tulsa Chamber of Commerce and the Tulsa Club.

Oil Taxes in Oklahoma During Past Three Years

The Oklahoma Tax Commission, created January 19, 1931, has issued a detailed report of tax collections for 1932, 1933 and 1934.

Gross production tax collected in Oklahoma for the three fiscal years ending June 30, 1934, amounted to $12,702,379.25 and petroleum excise tax collection totaled $229,811.45. To collect the $12,932,190.70 cost the commission $77,291.39, or .5977 per cent.

Gasoline taxes collected in the three fiscal years ending June 30, 1934, amounted to $31,250,034.49. The cost of collection was $203,976.63, or .6527 per cent.

A total of $11,093,015.88 was collected for the three years ending June 30, 1934, from the registration of motor vehicles. The number of vehicles registered increased, but the total license revenue diminished. For 1931-32 443,258 vehicles were registered and $4,765,080.07 collected; for 1932-33 462,955 vehicles were registered, providing revenue of $3,294,961.07; and for 1933-34, 522,787 vehicles were registered, the fees amounting to $3,032,974.74.

DRILLING CONTRACTORS MEET

DALLAS, Tex., Jan. 7.—The annual meeting of the Texas-Louisiana-New Mexico Drilling Contractors Association is to be held at the Baker Hotel on Saturday, January 12, 1935, at which time there will be the election of officers and new directors of the association.

WINDSOR SYSTEM EXTENDED

WINDSOR, Ontario, Jan. 5.—In the course of 1934 the Windsor Gas Co., subsidiary of the Union Gas Co. in the Border Cities area, extended its operating area to take in Essex, Belle River, St. Joachim, Ruscomb and intervening territory.

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Tech. grad. with 14 yrs. exp. in oil refinery design, construction, maintenance, and efficiency work, desires change. Address Box G-505, The Oil and Gas Journal, Tulsa, Okla.

Natural Gasoline Plant Supt. with 21 years' experience with all types of Natural Gasoline Plants, desires Supt. position. Best of references furnished. Address Box G-503, The Oil and Gas Journal, Tulsa, Okla.

REFINERY ENGINEER. Designer, draftsman, actual plant experience in construction and operation, pressure, atmospheric, vacuum units, etc. Address Box G-502, The Oil and Gas Journal, Tulsa, Okla.

Help Wanted

ENGINEER-Salesman Wanted — Acquainted with operators of oil well and industrial contractors' equipment, and requirements of frictions and anti-friction material in Mid-Continent Field. Must have capability, follow instructions, proceed without supervision. Good opportunity for right man with an aggressive growing firm of long experience. Give full information for recognition. Address Box G-508, The Oil and Gas Journal, Tulsa, Okla.

CHEMIST Wanted with refinery operating and chemical laboratory experience. Good personality and ability to handle other men. State salary desired. Address Box G-504, The Oil and Gas Journal, Tulsa, Okla.

Incorporations

CHARTERS—Delaware best, quickest, cheapest, most liberal. Free forms. Colonial Charter Co., Wilmington, Del.

DELAWARE CHARTERS—Fees small; submitted forms. Chas. G. Guyer, 901 Market Street, Wilmington, Del.

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Wanted—Few hundred bbls. daily good quality crude in location suitable for small skimming plant in Colo., N. M., Utah, Ariz. Give particulars, crude and location. Address Box G-506, The Oil and Gas Journal, Tulsa, Okla.

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25 K.W. and 40 K.W. Gas Engines, 220 volts, D.C. Two 100 K.W. Gas Engine Generator Sets, 220 volts, D.C. 7x6 Ingersoll-Rand ER-1 Air Compressor. Six-inch Oster Pipe Threading Machine. Also, large stock of lathes, pipe machines, milling machines, etc. Send for our list.

Terms to suit.

CINCINNATI MACHINERY & SUPPLY CO.
26 West 2nd St. Cincinnati, Ohio.

IMPROVED N-Sullivan Core Drilling Machine completely equipped for rotary drilling for shallow production. Address Box G-470, The Oil and Gas Journal, Tulsa, Okla.

FOR SALE—120 foot Steel Parkersburg Derrick. Also 96 and 122 foot Derricks, all new timbers. New and used 4 inch tool joints and other Oil Field Equipment. SHAWNEE OIL FIELD SUPPLY CO., 120 S. Harrison, Shawnee. Oklahoma.

4—INGERSOLL RAND Compressors, Type XOB, Two Stage. Low 10"x10", High 4½"x10". Complete with lubricators, inter coolers, etc. Powered by 75 HP G.E. Induction Motor.

1—75 HP GENERAL ELECTRIC Induction Motor.

1—24'x60'x12' High Wood frame sheet iron Engine Room. Address Box G-510, The Oil and Gas Journal, Tulsa, Okla.

FOR SALE—15/30 H.P. Electric Motors, 440 volt, complete with grid controls. Rawls Elec. Works, Abilene, Tex.

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AND WANTED TO BUY

All kinds Good Used Compressors, Diesel Engines, Boilers, Derricks, Hoists, Tanks, Pipe, Rail, Cars, Locomotives, Cranes. MISSISSIPPI VALLEY EQUIPMENT CO., 501 Locust St., St. Louis, Mo.

Equipment Wanted

WANTED

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THE OIL AND GAS JOURNAL
Tulsa, Oklahoma

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Tulsa, Oklahoma

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NEW MEXICO—My weekly scout report furnishes complete and reliable information on New Mexico developments. Send for copy. W. S. Patterson, Santa Fe, N. Mex.

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